SEQUENCE LISTING

<110> Frudakis, Tony N.
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<120> COMPOSITIONS AND METHODS FOR THE
   THERAPY AND DIAGNOSIS OF BREAST CANCER

<130> 210121.419C9

<140> US
<141> 2000-06-08

<160> 324

<170> FastSEQ for Windows Version 3.0

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<212> DNA
<213> Homo sapien

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cacctccagg aggcttatcg gatttacacc ccttttgacc tggcagcccc cgaaaatagc   240
catgctctta atttggcatt tgtggctcag gcagccccag atagtaaaag gaaactccaa   300
aaactagagg gattttgctg gaatgaatac cagtcagctt ttagagatag cctaaaaggt   360
ttt   363

<210> 2
<211> 121
<212> PRT
<213> Homo sapien

<400> 2
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Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val Gly Ile Gln
            20   25   30
Gly Ala Ala Gln Lys Pro Ile Asn Leu Ser Lys Ala Ile Glu Val Val
            35   40   45

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Gln Gly His Asp Glu Ser Pro Gly Val Phe Leu Glu His Leu Gln Glu
    50                  55                  60
Ala Tyr Arg Ile Tyr Thr Pro Phe Asp Leu Ala Ala Pro Glu Asn Ser
65                  70                  75                  80
His Ala Leu Asn Leu Ala Phe Val Ala Gln Ala Ala Pro Asp Ser Lys
                85                  90                  95
Arg Lys Leu Gln Lys Leu Glu Gly Phe Cys Trp Asn Glu Tyr Gln Ser
                100                 105                 110
Ala Phe Arg Asp Ser Leu Lys Gly Phe
        115                 120
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        <210> 3
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        <220>
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        <223> n = A,T,C or G

        <400> 3
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tcttcaaagc ctaacagatc aagcagctct ccggtgcaca acctgcgccc aggtaaatgc   180
caaaaaaggt cctaaaccca gcccaggcca ccgtctccaa gaaaactcac caggagaaaa   240
gtgggaaatt gactttacag aagtaaaacc acaccgggct gggtacaaat accttctagt   300
actggtagac accttctctg gatggactga agcatttgct accaaaaacg aaactgtcaa   360
tatggtagtt aagtttttac tcaatgaaat catccctcga cgtgggctgc ctgttgccat   420
agggtctgat aatggaacgg ccttcgcctt gtctatagtt taatcagtca gtaaggcgtt   480
aaacattcaa tggaagctcc attgtgccta tcgacccaga gctctgggca agtagaacgc   540
atgaactgca ccctaaaaaa acactcttac aaaattaatc ttaaaaaccg tgttaattg    600
tgttagtctc cttcccttag ccctacttag agttaaggtg cacccttac tgggctgggt    660
tctttacctt ttgaaatcat ntttnggaag gggctgccta tctttnctta actaaaaaan   720
gcccatttgg caaaaatttc ncaactaatt tntacgtncc tacgtctccc caacaggtan   780
aaaaatctnc tgccctttc aaggaaccat cccatccatt cctnaacaaa aggcctgccn    840
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anggcccgga accnttaaan tngttccngg gggtnnggcc taaaagnccn atttggtaaa   1020
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        <211> 1087
        <212> DNA
        <213> Homo sapien

        <220>
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        <223> n = A,T,C or G
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tttccatcat tttaaggggt taaaatcatc ttgttcagac ctcagcatat aaaatgaccc     180
atctgtagac ctcaggctcc aaccataccc caagagttgt ctggttttgt ttaaattact     240
gccaggtttc agctgcagat atccctggaa ggaatattcc agattccctg agtagtttcc     300
aggttaaaat cctataggct tcttctgttt tgaggaagag ttcctgtcag agaaaaacat     360
gattttggat ttttaacttt aatgcttgtg aaacgctata aaaaaaattt tctacccta     420
gctttaaagt actgttagtg agaaattaaa attccttcag gaggattaaa ctgccatttc     480
agttaccta attccaaatg ttttggtggt tagaatcttc tttaatgttc ttgaagaagt     540
gttttatatt ttcccatcna gataaattct ctcncncctt nnttttntnt ctnntttttt     600
aaaacggant cttgctccgt tgtccangct gggaatttn ttttggccaa tctccgctnc     660
cttgcaanaa tnctgcntcc caaaattacc nccttttcc cacctccacc ccnnggaatt     720
acctggaatt anaggccccc nccccccccc cggctaattt gttttgtttt ttagtaaaaa     780
acgggtttcc tgttttagtt aggatggccc anntctgacc ccntatcnt cccccctcngc     840
cctcnaatnt tnggnntang gcttacccccc cccngnngtt tttcctccat tnaaattttc     900
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cnantnt                                                              1087


        <210> 5
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        <212> DNA
        <213> Homo sapien

        <220>
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        <223> n = A,T,C or G

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aggtaacaca catactatct cccaaatacc tacccacaag ctcaacaatt ttaaactgtt     180
aggatcactg gctctaatca ccatgacatg aggtcaccac caaaccatca agcgctaaac     240
agacagaatg tttccactcc tgatccactg tgtgggaaga agcaccgaac ttacccactg     300
gggggcctgc ntcanaanaa aagcccatgc ccccgggtnt nccttnaac cggaacgaat     360
naacccacca tccccacanc tcctctgttc ntgggccctg catcttgtgg cctcntntnc     420
tttnggggan acntggggaa ggtaccccat ttcnttgacc ccncnanaaa accccngtgg     480
cccttgccc tgattcncnt gggcctttc tcttttccct tttgggttgt ttaaattccc     540
aatgtccccn gaaccctctc cntnctgccc aaaacctacc taaattnctc nctangnntt     600
ttcttggtgt tncttttcaa aggtnacctt nctgttcan ncccacnaa aatttnttcc     660
ntatnntggn cccnnaaaaa nnnatcnncc cnaattgccc gaattggttn ggttttttcct     720
nctgggggaa acccttaaa tttcccccctt ggccggcccc ccttttttcc cccctttnga     780
aggcaggngg ttcttcccga acttccaatt ncaacagccn tgcccattgn tgaaacccctt     840
ttcctaaaat taaaaaatan ccggttnngg nnggcctctt tcccctccng gnggggnngng     900
aaantcctta ccccnaaaaa ggttgcttag cccccngtcc ccactccccc nggaaaaatn     960
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        <210> 6
```

4

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<211> 950
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(950)
<223> n = A,T,C or G

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ctgggattac aggcgtgcaa caccacaccc ggctaatttt gtatttttaa tagagatggg     180
gtttttccctt gttggccann atggtctcna acccctgacc tcnngtgatc ccccncccn     240
nganctcnna ctgctgggga tnnccgnnnn nnncctcccn ncncnnnnnn ncncnntccn     300
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cnnnccncnt ncccncnnnt tcncntncnn tntccnncnn nntcnncnnn cnnnncntnn     420
ccnntacntc ntnnncnnnt ccntctntnn cctcnncnnt cnctncncnt tntctcctcn     480
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tcnnttcncc cnnntccncc ccccnccnt ctctcncccn nntnnntntn nnncntccnc     720
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ccnntntntn tnncnccnnt nctnnncnnc cntcntttcn tctctnctnn nnntnncctc     900
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<211> 1086
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
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<223> n = A,T,C or G

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agaaaaattc ttctgccttg agatgctgtt aatctgtaac cctagcccca accctgtgct     180
cacagagaca tgtgctgtgt tgactcaagg ttcaatggat ttagggctat gctttgttaa     240
aaaagtgctt gaagataata tgcttgttaa aagtcatcac cattctctaa tctcaagtac     300
ccagggacac aatacactgc ggaaggccgc agggacctct gtctaggaaa gccaggtatt     360
gtccaagatt tctccccatg tgatagcctg agatatggcc tcatgggaag ggtaagacct     420
gactgtcccc cagcccgaca tcccccagcc cgacatcccc cagcccgaca cccgaaaagg     480
gtctgtgctg aggaagatta ntaaaagagg aaggctcttt gcattgaagt aagaagaagg     540
ctctgtctcc tgctcgtccc tgggcaataa aatgtcttgg tgttaaaccc gaatgtatgt     600
tctacttact gagaatagga gaaaacatcc ttagggctgg aggtgagaca ccctggcggc     660
atactgctct ttaatgcacg agatgtttgt ntaattgcca tccagggcca nccccttttcc     720
ttaacttttt atganacaaa aactttgttc ncttttcctg cgaacctctc ccctattan     780
```

```
cctattggcc tgcccatccc ctccccaaan ggtgaaaana tgttcntaaa tncgagggaa      840
tccaaaacnt tttcccgttg gtcccctttc caaccccgtc cctgggccnn tttcctcccc      900
aacntgtccc ggntccttcn ttcccncccc cttcccngan aaaaaacccc gtntganggn      960
gcccctcaa attataacct ttccnaaaca aannggttcn aaggtggttt gnttccggtg      1020
cggctggcct tgaggtcccc cctncacccc aatttggaan ccngtttttt ttattgcccn      1080
ntcccc                                                                1086
```

        <210> 8
        <211> 1177
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
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        <223> n = A,T,C or G

        <400> 8

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atggtgttta aatccagcta cactacttcc tgactcaaac tccactattc ctgttcatga      180
ctgtcaggaa ctgttggaaa ctactgaaac tggccgacct gatcttcaaa atgtgcccct      240
aggaaaggtg gatgccaccg tgttcacaga cagtaccncc ttcctcgaga agggactacg      300
aggggccggt gcanctgtta ccaaggagac tnatgtgttg tgggctcagg ctttaccanc      360
aaacacctca ncncnnaagg ctgaattgat cgccctcact caggctctcg gatggggtaa      420
gggatattaa cgttaacact gacagcaggt acgcctttgc tactgtgcat gtacgtggag      480
ccatctacca ggagcgtggg ctactcactc ggcaggtggc tgtnatccac tgtaaangga      540
catcaaaagg aaaacnnggc tgttgcccgt ggtaaccana aanctgatcn ncagctcaa       600
gatgctgtgt tgactttcac tcncncctct taaacttgct gcccacantc tcctttccca      660
accagatctg cctgacaatc cccatactca aaaaaaaaan aanactggcc ccgaacccna      720
accaataaaa acggggangg tnggtnganc nncctgaccc aaaaataatg gatcccccgg      780
gctgcaggaa ttcaattcan ccttatcnat accccaacn nggnggggg ggccngtncc        840
cattnccct ntattnattc tttnncccc cccccggcnt ccttttnaa ctcgtgaaag         900
ggaaaacctg ncttaccaan ttatcncctg gaccntcccc ttccncggtn gnttanaaaa      960
aaaagcccnc antccntcc naaatttgca cngaaaggna aggaatttaa cctttatttt       1020
ttnntccttt antttgtnnn ccccctttta cccaggcgaa cngccatcnt ttaanaaaaa      1080
aaanagaang tttattttc cttngaacca tcccaatana aancacccgc nggggaacgg       1140
ggnggnaggc cnctcacccc ctttntgtng gnggnc                               1177
```

        <210> 9
        <211> 1146
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
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gaaaagggtc aaaaggagct gttgacagtc atcccaggtg ggccaatgtg tccagagtac    120
agactccatc agtgaggtca aagcctgggg cttttcagag aagggaggat tatgggtttt    180
ccaattatac aagtcagaag tagaaagaag ggacataaac caggaagggg gtggagcact    240
catcacccag agggacttgt gcctctctca gtggtagtag aggggctact tcctcccacc    300
acggttgcaa ccaagaggca atgggtgatg agcctacagg ggacatancc gaggagacat    360
gggatgaccc taagggagta ggctggtttt aaggcggtgg gactgggtga gggaaactct    420
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gaagccggga atttcattaa caacccgcca cacagcttga acattgtgag gttcagtgac    660
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ggaaaaggcc cancccttac caggctggaa gaaattttnc cttttttttt tttttgaagg    840
cntttnttaa attgaacctn aattcncccc cccaaaaaaa aacccnccng gggggcggat    900
ttccaaaaac naattccctt accaaaaaac aaaaacccnc ccttnttccc ttccnccctn    960
ttcttttaat tagggagaga tnaagccccc caatttccng gnctngatnn gtttcccccc   1020
cccccatttt ccnaaacttt ttcccancna ggaanccncc ctttttttng gtcngattna   1080
ncaaccttcc aaaccatttt tccnnaaaaa ntttgntngg ngggaaaaan acctnntttt   1140
atagan                                                             1146
```

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        <211> 545
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        <213> Homo sapien

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tattggctct gagttctgag gccagttttc ttcttctgtt gagtatgcgg gattgtcagg    180
cagatctggc tgtggaaagg agactgtggg cagcaagttt agaggcgtga ctgaaagtca    240
cactgcatct tgagctgctg aatcagcttt ctggttacca cgggcaacag ccgtgttttc    300
cttttgatgt cctttacagt ggattacagc cacctgctga ggtgagtagc ccacgctcct    360
ggtagatggc tccacgtaca tgcacagtag caaaggcgta cctgctgtca gtgttaacgt    420
taatatcctt accccatcgg agagcctgag tgagggcgat caattcagcc cttttgtgct    480
gaggtgtttg ctggttaagc cctgaaccca caacacatct gtctccatgg taacagctgc    540
accgg                                                               545
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```
        <210> 11
        <211> 196
        <212> DNA
        <213> Homo sapien

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gggggggatcg cttgagccca agatttcaag actagtctgg gtaacatagt gagaccctat    120
ctctacgaaa aaataaaaaa atgagcctgg tgtagtggca cacaccagct gaggagggag    180
aatcgagcct aggaga                                                   196
```

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<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(388)
<223> n = A,T,C or G

<400> 12
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tgacaccaac ttacactgtg gnctccaata aactgcttct ttcctattcc ctctctatta   120
aataaaataa ggaaaacgat gtctgtgtat agccaagtca gntatcctaa aaggagatac   180
taagtgacat taaatatcag aatgtaaaac ctgggaacca ggttcccagc ctgggattaa   240
actgacagca agaagactga acagtactac tgtgaaaagc ccgaagnggc aatatgttca   300
ctctaccgtt gaaggatggc tgggagaatg aatgctctgt cccccagtcc caagctcact   360
tactatacct cctttatagc ctaggaga                                      388
```

<210> 13
<211> 337
<212> DNA
<213> Homo sapien

<400> 13
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taccctgaaa aatatgaggg aaatatatga aacagggagg caatgttcag ataattgatc   120
acaagatatg atttctacat cagatgctct ttcctttcct gtttatttcc tttttatttc   180
ggttgtgggg tcgaatgtaa tagctttgtt tcaagagaga gttttggcag tttctgtagc   240
ttctgacact gctcatgtct ccaggcatct atttgcactt taggaggtgt cgtgggagac   300
tgagaggtct attttttcca tatttgggca actacta                            337
```

<210> 14
<211> 571
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(571)
<223> n = A,T,C or G

<400> 14
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agtgttcagc tggtgttttt tactgtaaac aataaggaga ctttgctctt catttaaacc   120
aaaatcatat ttcatatttt acgctcgagg gttttaccg gttccttttt acactcctta    180
aaacagtttt taagtcgttt ggaacaagat attttttctt tcctggcagc ttttaacatt   240
atagcaaatt tgtgtctggg ggactgctgg tcactgtttc tcacagttgc aaatcaaggc   300
atttgcaacc aagaaaaaaa aattttttg ttttatttga aactggaccg gataaacggt    360
gtttggagcg gctgctgtat atagttttaa atggtttatt gcacctcctt aagttgcact   420
tatgtggggg ggggnttttg natagaaagt ntttantcac anagtcacag ggactttnt    480
cttttggnna ctgagctaaa aagggctgnt tttcgggtgg gggcagatga aggctcacag   540
gaggcctttc tcttagaggg gggaactnct a                                   571
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<210> 15
<211> 548
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(548)
<223> n = A,T,C or G

<400> 15
tatatattta ataacttaaa tatattttga tcacccactg gggtgataag acaatagata    60
taaaagtatt tccaaaaagc ataaaaccaa agtatcatac caaaccaaat tcatactgct   120
tcccccaccc gcactgaaac ttcaccttct aactgtctac ctaaccaaat tctacccttc   180
aagtctttgg tgcgtgctca ctactctttt tttttttttt tttnttttgg agatggagtc   240
tggctgtgca gcccagggt ggagtacaat ggcacaacct cagctcactg naacctccgc    300
ctcccaggtt catgagattc tcctgnttca gccttcccag tagctgggac tacaggtgtg   360
catcaccatg cctggntaat ctttttttngt tttngggtag agatggggggt tttacatgtt   420
ggccaggntg gtntcgaact cctgacctca agtgatccac ccacctcagg ctcccaaagt   480
gctaggatta cagacatgag ccactgngcc cagncctggt gcatgctcac ttctctaggc   540
aactacta                                                           548

<210> 16
<211> 638
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(638)
<223> n = A,T,C or G

<400> 16
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gcaatccgag cctatcctca agatgagtat ttagaaagaa ttgatttagc gatagaccaa   120
gctggtaagc actctgacta cacgaaattg ttcagatgtg atggatttat gacagttgat   180
ctttggaaga gattattaag tgattatttt aaagggaatc cattaattcc agaatatctt   240
ggtttagctc aagatgatat agaaatagaa cagaaagaga ctacaaatga agatgtatca   300
ccaactgata ttgaagagcc tatagtagaa aatgaattag ctgcatttat tagccttaca   360
catagcgatt ttcctgatga atcttatatt cagccatcga catagcatta cctgatgggc   420
aaccttacga ataatagaaa ctgggtgcgg ggctattgat gaattcatcc ncagtaaatt   480
tggatatnac aaaatataac tcgattgcat ttggatgatg gaatactaaa tctggcaaaa   540
gtaactttgg agctactagt aacctctctt tttgagatgc aaaattttct tttagggttt   600
cttattctct actttacgga tattggagca taacggga                          638

<210> 17
<211> 286
<212> DNA
<213> Homo sapien

<400> 17
```

```
actgatggat gtcgccggag gcgaggggcc ttatctgatg ctcggctgcc tgttcgtgat      60
gtgcgcggcg attgggctgt ttatctcaaa caccgccacg gcggtgctga tggcgcctat     120
tgccttagcg gcggcgaagt caatgggcgt ctcaccctat ccttttgcca tggtggtggc     180
gatggcggct tcggcggcgt ttatgacccc ggtctcctcg ccggttaaca ccctggtgct     240
tggccctggc aagtactcat ttagcgattt tgtcaaaata ggcgtg                    286
```

```
        <210> 18
        <211> 262
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(262)
        <223> n = A,T,C or G


        <400> 18
tcggtcatag cagccccttc ttctcaattt catctgtcac taccctggtg tagtatctca      60
tagccttaca tttttatagc ctcctccctg gtctgtcttt tgattttcct gcctgtaatc     120
catatcacac ataactgcaa gtaaacattt ctaaagtgtg gttatgctca tgtcactcct     180
gtgncaagaa atagtttcca ttaccgtctt aataaaattc ggatttgttc tttnctattn     240
tcactcttca cctatgaccg aa                                              262
```

```
        <210> 19
        <211> 261
        <212> DNA
        <213> Homo sapien


        <400> 19
tcggtcatag caaagccagt ggtttgagct ctctactgtg taaactccta aaccaaggcc      60
atttatgata aatggtggca ggattttat tataaacatg tacccatgca aatttcctat     120
aactctgaga tatattcttc tacatttaaa caataaaaat aatctatttt taaaagccta     180
atttgcgtag ttaggtaaga gtgtttaatg agagggtata aggtataaat caccagtcaa     240
cgtttctctg cctatgaccg a                                               261
```

```
        <210> 20
        <211> 294
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(294)
        <223> n = A,T,C or G


        <400> 20
tacaacgagg cgacgtcggt aaaatcggac atgaagccac cgctggtctt ttcgtccgag      60
cgataggcgc cggccagcca gcggaacggt tgcccggatg gcgaagcgag ccggagttct     120
tcggactgag tatgaatctt gttgtgaaaa tactcgccgc cttcgttcga cgacgtcgcg     180
tcgaaatctt cganctcctt acgatcgaag tcttcgtggg cgacgatcgc ggtcagttcc     240
gccccaccga aatcatggtt gagccggatg ctgnccccga agncctcgtt tgtn            294
```

```
<210> 21
<211> 208
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 21
ttggtaaagg gcatggacgc agacgcctga cgtttggctg aaaatctttc attgattcgt      60
atcaatgaat aggaaaattc ccaaagaggg aatgtcctgt tgctcgccag tttttntgtt     120
gttctcatgg anaaggcaan gagctcttca gactattggn attntcgttc ggtcttctgc     180
caactagtcg ncttgcnang atcttcat                                         208


<210> 22
<211> 287
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(287)
<223> n = A,T,C or G

<400> 22
nccnttgagc tgagtgattg agatntgtaa tggttgtaag ggtgattcag gcggattagg      60
gtggcgggtc acccggcagt gggtctcccg acaggccagc aggatttggg gcaggtacgg     120
ngtgcgcatc gctcgactat atgctatggc aggcgagccg tggaaggngg atcaggtcac     180
ggcgctggag ctttccacgg tccatgnatt gngatggctg ttctaggcgg ctgttgccaa     240
gcgtgatggt acgctggctg gagcattgat ttctggtgcc aaggtgg                   287


<210> 23
<211> 204
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(204)
<223> n = A,T,C or G

<400> 23
ttgggtaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact      60
gggccaagct gtcgccgggg atggtggaga actgaagcgg gacctcctcg aggtcctccg     120
ncgttacttc nccgtccagg aggagggtct ttccgtggtc tnggaggagc gggggggagaa    180
gatnctcctc atggtcnaca tccc                                            204


<210> 24
```

<210> 24 (implied)

<211> 264
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(264)
<223> n = A,T,C or G

<400> 24
```
tggattggtc aggagcgggt agagtggcac cattgagggg atattcaaaa atattatttt      60
gtcctaaatg atagttgctg agttttcctt tgacccatga gttatattgg agtttatttt     120
ttaactttcc aatcgcatgg acatgttaga cttattttct gttaatgatt nctattttta     180
ttaaattgga tttgagaaat tggttnttat tatatcaatt tttggtattt gttgagtttg     240
acattatagc ttagtatgtg acca                                            264
```

<210> 25
<211> 376
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 25
```
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg      60
tgcacccgca atcccagcta cttgggaggt tgagacacaa gantcaccta natgtgggag     120
gtcaaggttg catgagtcat gattgtgcca ctgcactcca gcctgggtga cagaccgaga     180
ccctgcctca anaganaang aataggaagt tcagaaatcn tggntgtggn gcccagcaat     240
ctgcatctat ncaacccctg caggcaangc tgatgcagcc tangttcaag agctgctgtt     300
tctggaggca gcagttnggg cttccatcca gtatcacggc cacactcgca cnagccatct     360
gtcctccgtn tgtnac                                                     376
```

<210> 26
<211> 372
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 26
```
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg      60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgggag     120
ggtcaaggtt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag     180
accctgcctc aaaagaaaaa gaataggaag ttcagaaacc ctgggtgtgg ngcccagcaa     240
tctgcattta aacaatccct gcaggcaatg ctgatgcagc ctaagttcaa gagctgctgt     300
```

```
tctggaggca gnagtaaggg cttccatcca gcatcacggn caacactgca aaagcacctg    360
tcctcgttgg ta                                                        372
```

```
<210> 27
<211> 477
<212> DNA
<213> Homo sapien

<400> 27
ttctgtccac atctacaagt tttatttatt ttgtgggttt tcagggtgac taagttttc    60
cctacattga aaagagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata    120
tgataatatg ggtccgtgct taatacaact gagacatatt tgttctctgt tttttagag    180
tcacctctta aagtccaatc ccacaatggt gaaaaaaaa tagaaagtat ttgttctacc    240
tttaaggaga ctgcagggat tctccttgaa aacggagtat ggaatcaatc ttaaataaat    300
atgaaattgg ttggtcttct gggataagaa attcccaact cagtgtgctg aaattcacct    360
gacttttttt gggaaaaaat agtcgaaaat gtcaatttgg tccataaaat acatgttact    420
attaaaagat atttaaagac aaattctttc agagctctaa gattggtgtg gacagaa       477
```

```
<210> 28
<211> 438
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(438)
<223> n = A,T,C or G

<400> 28
tctncaacct cttgantgtc aaaaaccttn taggctatct ctaaaagctg actggtattc    60
attccagcaa aatccctcta gtttttggag tttccttta ctatctgggg ctgcctgagc    120
cacaaatgcc aaattaagag catggctatt ttcggggggct gacaggtcaa aagggggtgta    180
aatccgataa gcctcctgga ggtgctctaa aaacactcct ggtgactcat catgcccctg    240
gacgacttca atcgncttag acaagtttat aggtttctgg gcagctccct gaatacccac    300
gaggagatac cggtggaaat cgtcaaaagt tctccctcca cttgagaaat ttgggtccca    360
attaggtccc aattgggtct ctaatcacta ttcctctagc ttcctcctcc ggnctattgg    420
ttgatgtgag gttgaaga                                                  438
```

```
<210> 29
<211> 620
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

<400> 29
aagagggtac cagccccaag ccttgacaac ttccataggg tgtcaagcct gtgggtgcac    60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca    120
```

```
cctaacacct agatattcag acaaaagttt actacaggga tgaagctttc acggaaaacc        180
tctactagga aagtacagaa gagaaatgtg ggtttggagc ccccaaacag aatcccctct        240
agaacactgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat        300
agacccacca aaaacttatg ccatattgcc tataaaacct acagacactc aatgccagcc        360
ccatgaaaaa aaaactgaga agaagactgt nccctacaat gccaccggag cagaactgcc        420
ccaggccatg gaagcacagc tcttatatca atgtgacctg gatgttgaga catggaatcc        480
nangaaatcn ttttaanact tccacggttn aatgactgcc ctattanatt cngaacttan        540
atccnggcct gtgacctctt tgctttggcc attccccctt tttggaatgg ctnttttttt        600
cccatgcctg tnccctctta                                                     620
```

```
        <210> 30
        <211> 100
        <212> DNA
        <213> Homo sapien


        <400> 30
ttacaacgag ggggtcaatg tcataaatgt cacaataaaa caatctcttc ttttttttttt       60
ttttttttt  ttttttttt  ttttttttt  tttttttttt                            100


        <210> 31
        <211> 762
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(762)
        <223> n = A,T,C or G


        <400> 31
tagtctatgc gccggacaga gcagaattaa attggaagtt gccctccgga ctttctaccc        60
acactcttcc tgaaaagaga aagaaaagag gcaggaaaga ggttaggatt tcattttcaa        120
gagtcagcta attaggagag cagagtttag acagcagtag gcaccccatg atacaaacca        180
tggacaaagt ccctgtttag taactgccag acatgatcct gctcaggttt tgaaatctct        240
ctgcccataa aagatggaga gcaggagtgc catccacatc aacacgtgtc caagaaagag        300
tctcagggag acaagggtat caaaaaacaa gattcttaat gggaaggaaa tcaaaccaaa        360
aaattagatt tttctctaca tatatataat atacagatat ttaacacatt attccagagg        420
tggctccagt ccttggggct tgagagatgg tgaaaacttt tgttccacat taacttctgc        480
tctcaaattc tgaagtatat cagaatggga caggcaatgt tttgctccac actggggcac        540
agacccaaat ggttctgtgc ccgaagaaga gaagcccgaa agacatgaag gatgcttaag        600
gggggttggg aaagccaaat tggtantatc ttttcctcct gcctgtgttc cngaagtctc        660
cnctgaagga attcttaaaa ccctttgtga ggaaatgccc ccttaccatg acaantggtc        720
ccattgcttt tagggngatg gaaacaccaa gggttttgat cc                          762


        <210> 32
        <211> 276
        <212> DNA
        <213> Homo sapien


        <400> 32
tagtctatgc gtgtattaac ctcccctccc tcagtaacaa ccaaagaggc aggagctgtt        60
```

```
attaccaacc ccattttaca gatgcatcaa taatgacaga gaagtgaagt gacttgcgca      120
cacaaccagt aaattggcag agtcagattt gaatccatgg agtctggtct gcactttcaa      180
tcaccgaata ccctttctaa gaaacgtgtg ctgaatgagt gcatggataa atcagtgtct      240
actcaacatc tttgcctaga tatcccgcat agacta                                276


        <210> 33
        <211> 477
        <212> DNA
        <213> Homo sapien


        <400> 33
tagtagttgc caaatatttg aaaatttacc cagaagtgat tgaaaacttt ttggaaacaa       60
aaacaaataa agccaaaagg taaaataaaa atatctttgc actctcgtta ttacctatcc      120
ataacttttt caccgtaagc tctcctgctt gttagtgtag tgtggttata ttaaacttttt     180
tagttattat tttttattca ctttttccact agaaagtcat tattgattta gcacacatgt     240
tgatctcatt tcatttttttc tttttatagg caaaatttga tgctatgcaa caaaaatact     300
caagcccatt atcttttttc cccccgaaat ctgaaaattg caggggacag agggaagtta      360
tcccattaaa aaattgtaaa tatgttcagt ttatgtttaa aaatgcacaa aacataagaa      420
aattgtgttt acttgagctg ctgattgtaa gcagttttat ctcaggggca actacta         477


        <210> 34
        <211> 631
        <212> DNA
        <213> Homo sapien


        <400> 34
tagtagttgc caattcagat gatcagaaat gctgctttcc tcagcattgt cttgttaaac       60
cgcatgccat ttggaacttt ggcagtgaga agccaaaagg aagaggtgaa tgacatatat      120
atatatatat attcaatgaa agtaaaatgt atatgctcat atactttcta gttatcagaa      180
tgagttaagc tttatgccat tgggctgctg catatttttaa tcagaagata aaagaaaatc     240
tgggcatttt tagaatgtga tacatgtttt tttaaaactg ttaaatatta tttcgatatt      300
tgtctaagaa ccggaatgtt cttaaaattt actaaaacag tattgtttga ggaagagaaa      360
actgtactgt ttgccattat tacagtcgta caagtgcatg tcaagtcacc cactctctca      420
ggcatcagta tccacctcat agctttacac atttttgacgg ggaatattgc agcatcctca     480
ggcctgacat ctgggaaagg ctcagatcca cctactgctc cttgctcgtt gatttgtttt      540
aaaatattgt gcctggtgtc actttttaagc cacagccctg cctaaaagcc agcagagaac     600
agaacccgca ccattctata ggcaactact a                                     631


        <210> 35
        <211> 578
        <212> DNA
        <213> Homo sapien


        <400> 35
tagtagttgc catcccatat tacagaaggc tctgtataca tgacttattt ggaagtgatc       60
tgttttctct ccaaacccat ttatcgtaat ttcaccagtc ttggatcaat cttggtttcc      120
actgatacca tgaaacctac ttggagcaga cattgcacag ttttctgtgg taaaaactaa      180
aggtttattt gctaagctgt catcttatgc ttagtatttt ttttttacag tggggaattg      240
ctgagattac attttgttat tcattagata ctttgggata acttgacact gtcttctttt      300
tttcgctttt aattgctatc atcatgcttt tgaaacaaga acacattagt cctcaagtat      360
tacataagct tgcttgttac gcctggtggt ttaaaggact atctttggcc tcaggttcac      420
```

```
aagaatgggc aaagtgtttc cttatgttct gtagttctca ataaaagatt gccaggggcc      480
gggtactgtg gctcgcactg taatcccagc actttgggaa gctgaggctg gcggatcatg      540
ttagggcagg tgttcgaaac cagcctgggc aactacta                             578
```

```
        <210> 36
        <211> 583
        <212> DNA
        <213> Homo sapien


        <400> 36
tagtagttgc ctgtaatccc agcaactcag gaggctgggg caggagaatc agttgaacct      60
gggaggcaga agttgtaatt agcaaagatc gcaccattgc acttcagcct gggcaacaag     120
agtgagattc catctcaaaa acaaaaaaaa gaaaagaaa agaaaaggaa aaaacgtata      180
aacccagcca aaacaaaatg atcattcttt taataagcaa gactaattta atgtgtttat     240
ttaatcaaag cagttgaatc ttctgagtta ttggtgaaaa tacccatgta gttaatttag     300
ggttcttact tgggtgaacg tttgatgttc acaggttata aaatggttaa caaggaaaat     360
gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg ataggtgcta     420
tggatggagt ttttgtgtaa tttaaaatct tgaagtcatt ttggatgctc attggttgtc     480
tggtaatttc cattaggaaa aggttatgat atggggaaac tgtttctgga aattgcggaa     540
tgtttctcat ctgtaaaatg ctagtatctc agggcaacta cta                      583
```

```
        <210> 37
        <211> 716
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(716)
        <223> n = A,T,C or G


        <400> 37
gatctactag tcatntggat tctatccatg gcagctaagc ctttctgaat ggattctact      60
gctttcttgt tctttaatcc agacccttat atatgtttat gttcacaggc agggcaatgt     120
ttagtgaaaa caattctaaa ttttttattt tgcattttca tgctaatttc cgtcacactc     180
cagcaggctt cctgggagaa taaggagaaa tacagctaaa gacattgtcc ctgcttactt     240
acagcctaat ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta     300
gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt     360
cctagaatgt acaaggcttt ttaattacat attttatgta aggcctgcaa aaaacaggtg     420
agtaatcaac atttgtccca ttttacatat aaggaaactg aagcttaaat tgaataattt     480
aatgcataga ttttatagtt agaccatgtt caggtcccta tgttatactt actagctgta     540
tgaatatgag aaaataattt tgttattttc ttggcatcag tattttcatc tgcaaaataa     600
agctaaagtt atttagcaaa cagtcagcat agtgcctgat acatagtagg tgctccaaac     660
atgattacnc tantattngg tattanaaaa atccaatata ggcntggata aaaccg        716
```

```
        <210> 38
        <211> 688
        <212> DNA
        <213> Homo sapien


        <220>
```

```
<221> misc_feature
<222> (1)...(688)
<223> n = A,T,C or G

<400> 38
ttctgtccac atatcatccc actttaattg ttaatcagca aaactttcaa tgaaaaatca      60
tccattttaa ccaggatcac accaggaaac tgaaggtgta ttttttttta ccttaaaaaa     120
aaaaaaaaaa accaaacaaa ccaaaacaga ttaacagcaa agagttctaa aaaatttaca     180
tttctcttac aactgtcatt cagagaacaa tagttcttaa gtctgttaaa tcttggcatt     240
aacagagaaa cttgatgaan agttgtactt ggaatattgt ggattttttt ttttgtctaa     300
tctcccccta ttgttttgcc aacagtaatt taagtttgtg tggaacatcc ccgtagttga     360
agtgtaaaca atgtatagga aggaatatat gataagatga tgcatcacat atgcattaca     420
tgtagggacc ttcacaactt catgcactca gaaaacatgc ttgaagagga ggagaggacg     480
gcccagggtc accatccagg tgccttgagg acagagaatg cagaagtggc actgttgaaa     540
tttagaagac catgtgtgaa tggtttcagg cctgggatgt ttgccaccaa gaagtgcctc     600
cgagaaattt ctttcccatt tggaatacag ggtggcttga tgggtacggt gggtgaccca     660
acgaagaaaa tgaaattctg cccttttcc                                       688


<210> 39
<211> 585
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G

<400> 39
tagtagttgc cgcnnaccta aaanttggaa agcatgatgt ctaggaaaca tantaaaata      60
gggtatgcct atgtgctaca gagagatgtt agcatttaaa gtgcatantt ttatgtatttt    120
tgacaaatgc atatncctct ataatccaca actgattacg aagctattac aattaaaaag     180
tttggccggg cgtggtgggc ggtggctgac gcctgtaatc ccagcacttt gggaggccga     240
ggcacgcgga tcacgaggtc gggagttcaa gaccatcctg gctaacacgg tgaaagtcca     300
tctctactaa aaatacgaaa aaattacccc ggcgtggtgg cgggcgcctg tagtcccagc     360
tactccggag gctgaggcag gagaatggcg tgaacccagg acacggagct tgcagtgtgc     420
caacatcacg tcactgccct ccagcctggg ggacaggaac aagantcccg tcctcanaaa     480
agaaaaatac tactnatant ttcnacttta ttttaantta cacagaactn cctcttggta     540
cccccttacc attcatctca cccacctcct atagggcacn nctaa                     585


<210> 40
<211> 475
<212> DNA
<213> Homo sapien

<400> 40
tctgtccaca ccaatcttag aagctctgaa aagaatttgt ctttaaatat cttttaatag      60
taacatgtat tttatggacc aaattgacat tttcgactgt tttttccaaa aaagtcaggt     120
gaatttcagc acactgagtt gggaatttct tatcccagaa gaccaaccaa tttcatattt     180
atttaagatt gattccatac tccgtttttca aggagaatcc ctgcagtctc cttaaaggta     240
gaacaaatac ttcctatttt tttttcacca ttgtgggatt ggactttaag aggtgactct     300
```

```
aaaaaaacag agaacaaata tgtctcagtt gtattaagca cggacccata ttatcatatt      360
cacttaaaaa aatgatttcc tgtgcacctt ttggcaactt ctcttttcaa tgtagggaaa      420
aacttagtca ccctgaaaac ccacaaaata aataaaactt gtagatgtgg acaga            475
```

```
<210> 41
<211> 423
<212> DNA
<213> Homo sapien

<400> 41
taagagggta catcgggtaa gaacgtaggc acatctagag cttagagaag tctggggtag       60
gaaaaaaatc taagtattta taagggtata ggtaacattt aaaagtaggg ctagctgaca      120
ttatttagaa agaacacata cggagagata agggcaaagg actaagacca gaggaacact      180
aatatttagt gatcacttcc attcttggta aaaatagtaa cttttaagtt agcttcaagg      240
aagattttg gccatgatta gttgtcaaaa gttagttctc ttgggtttat attactaatt      300
ttgttttaag atccttgtta gtgctttaat aaagtcatgt tatatcaaac gctctaaaac      360
attgtagcat gttaaatgtc acaatatact taccatttgt tgtatatggc tgtaccctct      420
cta                                                                    423
```

```
<210> 42
<211> 527
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(527)
<223> n = A,T,C or G

<400> 42
tctcctaggc taatgtgtgt gtttctgtaa aagtaaaaag ttaaaaattt taaaaataga       60
aaaagcttta tagaataaga atatgaagaa agaaatatt tttgtacatt tgcacaatga      120
gtttatgttt taagctaagt gttattacaa aagagccaaa aaggttttaa aaattaaaac      180
gtttgtaaag ttacagtacc cttatgttaa tttataattg aagaaagaaa aacttttttt      240
tataaatgta gtgtagccta agcatacagt atttataaag tctggcagtg ttcaataatg      300
tcctaggcct tcacattcac tcactgactc acccagagca acttccagtc ctgtaagctc      360
cattcgtggt aagtgcccta tacaggtgca ccatttattt tacagtattt ttactgtacc      420
ttctctatgt ttccatatgt ttcgatatac aaataccact ggttactatn gcccnacagg      480
taattccagt aacacggcct gtatacgtct ggtanccpta gngaaga                    527
```

```
<210> 43
<211> 331
<212> DNA
<213> Homo sapien

<400> 43
tcttcaacct cgtaggacaa ctctcatatg cctgggcact attttttaggt tactaccttg       60
gctgcccttc tttaagaaaa aaaaagaag aaaaaagaac ttttccacaa gtttctcttc      120
ctctagttgg aaaattagag aaatcatgtt tttaattttg tgttatttca gatcacaaat      180
tcaaacactt gtaaacatta agcttctgtt caatcccctg ggaagaggat tcattctgat      240
atttacggtt caaagaagt tgtaatattg tgcttggaac acagagaacc agttattaac      300
```

ttcctactac tattatataa taaataataa c   331

```
        <210> 44
        <211> 592
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(592)
        <223> n = A,T,C or G

        <400> 44
ggcttagtag ttgccaggca aaatarcgtt gattctcctc aggagccacc cccaacaccc        60
ctgtttgctt ctagacctat acctagacta aagtcccagc agacccctag aggtgaggtt       120
cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagt tttctaattt       180
atataagcag aaatctggag aagagtcata ggaatggata ttaagggtgt gagataatgg       240
cggaaggaat atagagttgg atcaggctgg acttattgat ttgaacccac taagtagaga       300
ttctgctttt gatgttgcag ctcagggagt taaaaaaggt tttaatggtt ctaatagttt       360
atttgcttgg ttagctgaaa tatggataaa agatggccca ctgtgagcaa gctggaaatg       420
cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttggatg       480
ctggraktgg attggtcact ttgrgaccta cccwtcccag ctgggagggt ccagaagata       540
caccccttgac caacgctttg cgaaatggat ttgtgatggc ggcaactact aa               592

        <210> 45
        <211> 567
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(567)
        <223> n = A,T,C or G

        <400> 45
ggcttagtag ttgccattgc gagtgcttgc tcaacgagcg ttgaacatgg cggattgtct        60
agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg       120
ggttggttgg ctttgaaaag atggaaatcc tgtaggccta gtcagaaaag ccttcttgca       180
gaacagttgg ttctcgggcg aacgctcatc aagatgccca ttggaaaggc tagcgtgtat       240
ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat       300
atgcaaagca agtccgaact agacgtcaag cttcgtgagc aaattattgt agactcctac       360
ttatactgtg aggaatgata gccaagggtg gggactttaa gactaaggtg gtttgtactt       420
gcgccgatga tcccaggcag aaagamctga tcgctagttt tatacgggca actactaagc       480
cgaattccag cacactggcg gccgttacta attggatccg anctcggtac cagcttgatg       540
catascttga gttwtctata ntgtcnc                                           567

        <210> 46
        <211> 908
        <212> DNA
        <213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(908)
<223> n = A,T,C or G

<400> 46
gagcgaaaga ccgagggcag ngnntangng cgangaagcg gagagggcca aaaagcaacc      60
gctttccccg ggggtgccg attcattaag gcaggtggag gacaggtttc ccgatggaag     120
gcggcagggg cgcaagcaat taatgtgagt aggccattca ttagcacccg ggcttaacat     180
ttaagcttcg ggttggtatg tggtgggaat tgtgagcgga taacaatttc acacaggaaa     240
cagctatgac catgattacg ccaagctatt taggtgacat tatagaataa ctcaagttat     300
gcatcaagct tggtaccgag ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg     360
gcttagtagt tgccgaccat ggagtgctac ctaggctaga atacctgagy tcctccctag     420
cctcactcac attaaattgt atcttttcta cattagatgt cctcagcgcc ttatttctgc     480
tggacwatcg ataaattaat cctgatagga tgatagcagc agattaatta ctgagagtat     540
gttaatgtgt catccctcct atataacgta tttgcatttt aatggagcaa ttctggagat     600
aatccctgaa ggcaaaggaa tgaatcttga gggtgagaaa gccagaatca gtgtccagct     660
gcagttgtgg gagaaggtga tattatgtat gtctcagaag tgacaccata tgggcaacta     720
ctaagcccga attccagcac actggcgggc gttactaatg gatccgagct cggtaccaag     780
cttgatgcat agcttgagta tctatagtgt cactaaatag cctggcgtta tcatggtcat     840
agctgtttcc tgtgtgaaat tgttatccgc tcccaattcc ccccaccata cgagccggaa     900
cataaagt                                                             908


<210> 47
<211> 480
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(480)
<223> n = A,T,C or G

<400> 47
tgccaacaag gaaagtttta aatttcccct tgaggattct tggtgatcat caaattcagt      60
ggtttttaag gttgttttct gtcaaataac tctaacttta agccaaacag tatatggaag     120
cacagataka atattacaca gataaaagag gagttgatct aaagtaraga tagttggggg     180
ctttaatttc tggaacctag gtctccccat cttcttctgt gctgaggaac ttcttggaag     240
cggggattct aaagttcttt ggaagacagt ttgaaaacca ccatgttgtt ctcagtacct     300
ttatttttaa aaagtaggtg aacattttga gagagaaaag ggcttggttg agatgaagtc     360
cccccccccc ctttttttttt ttttagctga aatagatacc ctatgttnaa rgaarggatt     420
attatttacc atgccaytar scacatgctc tttgatgggc nyctccstac cctccttaag     480


<210> 48
<211> 591
<212> DNA
<213> Homo sapien

<400> 48
aagagggtac cgagtggaat ttccgcttca ctagtctggt gtggctagtc ggtttcgtgg      60
tggccaacat tacgaacttc caactcaacc gttcttggac gttcaagcgg gagtaccggc     120
```

```
gaggatggtg gcgtgaattc tggcctttct ttgccgtggg atcggtagcc gccatcatcg    180
gtatgtttat caagatcttc tttactaacc cgacctctcc gatttacctg cccgagccgt    240
ggtttaacga ggggaggggg atccagtcac gcgagtactg gtcccagatc ttcgccatcg    300
tcgtgacaat gcctatcaac ttcgtcgtca ataagttgtg gaccttccga acggtgaagc    360
actccgaaaa cgtccggtgg ctgctgtgcg gtgactccca aaatcttgat aacaacaagg    420
taaccgaatc gcgctaagga accccggcat ctcgggtact ctgcatatgc gtacccctta    480
agccgaattc cagcacactg gcggccgtta ctaattggat ccgaactccg taaccaagcc    540
tgatgcgtaa cttgagttat tctatagtgt ccctaaaata acctggcgtt a             591
```

```
<210> 49
<211> 454
<212> DNA
<213> Homo sapien
```

```
<400> 49
aagagggtac ctgccttgaa atttaaatgt ctaaggaaar tgggagatga ttaagagttg     60
gtgtggcyta gtcacaccaa aatgtatttta ttacatcctg ctcctttcta gttgacagga    120
aagaaagctg ctgtggggaa aggagggata aatactgaag ggatttacta aacaaatgtc    180
catcacagag ttttccttt tttttttttg agacagagtc ttgctctgtc acccaggctg      240
gaatgaagwg gtatgatctc agttgaatgc aacctctacc tcctaggttc aagcgattct     300
catgcctcag cctcctgagc agctgggact ataggcgcat gctaccatgc caggctaatt     360
tttatatttt tattagagac ggggtgttgc catgttggcc aggcaggtct cgaactcctg     420
ggcctcagat gatctgcccc accgtaccct ctta                                 454
```

```
<210> 50
<211> 463
<212> DNA
<213> Homo sapien
```

```
<400> 50
aagagggtac caaaaaaaag aaaaaggaaa aaaagaaaaa caacttgtat aaggctttct     60
gctgcataca gcttttttttt tttaaataaa tggtgccaac aaatgttttt gcattcacac    120
caattgctgg ttttgaaatc gtactcttca aaggtatttg tgcagatcaa tccaatagtg    180
atgccccgta ggttttgtgg actgcccacg ttgtctacct tctcatgtag gagccattga    240
gagactgttt ggacatgcct gtgttcatgt agccgtgatg tccggggggcc gtgtacatca    300
tgttaccgtg gggtggggtc tgcattggct gctgggcata tggctgggtg cccatcatgc     360
ccatctgcat ctgcataggg tattggggcg tttgatccat atagccatga ttgctgtggt     420
agccactgtt catcattggc tgggacatgc tgttaccctc tta                       463
```

```
<210> 51
<211> 399
<212> DNA
<213> Homo sapien
```

```
<400> 51
cttcaacctc ccaaagtgct gggattacag gactgagcca ccacgctcag cctaagcctc     60
tttttcacta ccctctaagc gatctaccac agtgatgagg ggctaaagag cagtgcaatt    120
tgattacaat aatggaactt agatttatta attaacaatt tttccttagc atgttggttc    180
cataattatt aagagtatgg acttacttag aaatgagctt tcattttaag aatttcatct    240
ttgaccttct ctattagtct gagcagtatg acactatacg tatttattt aactaaccta     300
ccttgagcta ttacttttta aaaggctata tacatgaatg tgtattgtca actgtaaagc    360
```

```
cccacagtat ttaattatat catgatgtct ttgaggttg                        399


        <210> 52
        <211> 392
        <212> DNA
        <213> Homo sapien


        <400> 52
cttcaacctc aatcaacctt ggtaattgat aaaatcatca cttaactttc tgatataatg    60
gcaataatta tctgagaaaa aaaagtggtg aaagattaaa cttgcatttc tctcagaatc   120
ttgaaggata tttgaataat tcaaaagcgg aatcagtagt atcagccgaa gaaactcact   180
tagctagaac gttggaccca tggatctaag tccctgccct tccactaacc agctgattgg   240
ttttgtgtaa acctcctaca cgcttgggct tggtcgcctc atttgtcaaa gtaaaggctg   300
aaataggaag ataatgaacc gtgtcttttt ggtctctttt ccatccatta ctctgatttt   360
acaaagaggc ctgtattccc ctggtgaggt tg                                392


        <210> 53
        <211> 179
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(179)
        <223> n = A,T,C or G


        <400> 53
ttcgggtgat gcctcctcag gctacagtga agactggatt acagaaaggt gccagcgaga    60
tttcagattc ctgtaaacct ctaaagaaaa ggagtcgcgc ctcaactgat gtagaaatga   120
ctagttcagc atacngagac acntctgact ccgattctag aggactgagt gacctgcan   179


        <210> 54
        <211> 112
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(112)
        <223> n = A,T,C or G


        <400> 54
ttcgggtgat gcctcctcag gctacatcat natagaagca aagtagaana atcnngtttg    60
tgcattttcc cacanacaaa attcaaatga ntggaagaaa ttggganagt at          112


        <210> 55
        <211> 225
        <212> DNA
        <213> Homo sapien


        <400> 55
```

```
tgagcttccg cttctgacaa ctcaatagat aatcaaagga caactttaac agggattcac     60
aaaggagtat atccaaatgc caataaacat ataaaaagga attcagcttc atcatcatca    120
gaagwatgca aattaaaacc ataatgagaa accactatgt cccactagaa tagataaaat    180
cttaaaagac tggtaaaacc aagtgttggt aaggcaagag gagca                    225


        <210> 56
        <211> 175
        <212> DNA
        <213> Homo sapien


        <400> 56
gctcctcttg ccttaccaac acattctcaa aaacctgtta gagtcctaag cattctcctg     60
ttagtattgg gattttaccc ctgtcctata aagatgttat gtaccaaaaa tgaagtggag    120
ggccataccc tgagggaggg gagggatctc tagtgttgtc agaagcggaa gctca         175


        <210> 57
        <211> 223
        <212> DNA
        <213> Homo sapien


        <400> 57
agccatttac cacccatgga tgaatggatt ttgtaattct agctgttgta ttttgtgaat     60
ttgttaattt tgttgttttt ctgtgaaaca catacattgg atatgggagg taaaggagtg    120
tcccagttgc tcctggtcac tccctttata gccattactg tcttgtttct tgtaactcag    180
gttaggtttt ggtctctctt gctccactgc aaaaaaaaaa aaa                      223


        <210> 58
        <211> 211
        <212> DNA
        <213> Homo sapien


        <400> 58
gttcgaaggt gaacgtgtag gtagcggatc tcacaactgg ggaactgtca aagacgaatt     60
aactgacttg gatcaatcaa atgtgactga ggaaacacct gaaggtgaag aacatcatcc    120
agtggcagac actgaaaata aggagaatga agttgaagag gtaaaagagg agggtccaaa    180
agagatgact ttggatgggt ggtaaatggc t                                    211


        <210> 59
        <211> 208
        <212> DNA
        <213> Homo sapien


        <400> 59
gctcctcttg ccttaccaac tttgcaccca tcatcaacca tgtggccagg tttgcagccc     60
 aggctgcaca tcaggggact gcctcgcaat acttcatgct gttgctgctg actgatggtg
120ctgtgacgga tgtggaagcc acacgtgagg ctgtggtgcg tgcctcgaac ctgcccatgt    180
 cagtgatcat tatgggtggt aaatggct                                       208


        <210> 60
        <211> 171
        <212> DNA
```

<213> Homo sapien

<400> 60

```
agccatttac cacccatact aaattctagt tcaaactcca acttcttcca taaaacatct      60
aaccactgac accagttggc aatagcttct tccttcttta acctcttaga gtatttatgg     120
tcaatgccac acatttctgc aactgaataa agttggtaag gcaagaggag c              171
```

<210> 61
<211> 134
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(134)
<223> n = A,T,C or G

<400> 61

```
cgggtgatgc ctcctcaggc tttggtgtgt ccactcnact cactggcctc ttctccagca      60
actggtgaan atgtcctcan gaaaancncc acacgcngct cagggtgggg tgggaancat     120
canaatcatc nggc                                                       134
```

<210> 62
<211> 145
<212> DNA
<213> Homo sapien

<400> 62

```
agagggtaca tatgcaacag tatataaagg aagaagtgca ctgagaggaa cttcatcaag      60
gccatttaat caataagtga tagagtcaag gctcaaccca ggtgtgacgg attccaggtc     120
ccaagctcct tactggtacc ctctt                                           145
```

<210> 63
<211> 297
<212> DNA
<213> Homo sapien

<400> 63

```
tgcactgaga ggaattcaaa gggtttatgc caaagaacaa accagtcctc tgcagcctaa      60
ctcatttgtt tttgggctgc gaagccatgt agagggcgat caggcagtag atggtccctc     120
ccacagtcag cgccatggtg gtccggtaaa gcatttggtc aggcaggcct cgtttcaggt     180
agacgggcac acatcagctt tctggaaaaa cttttgtagc tctggagctt tgttttttccc    240
agcataatca tacactgtgg aatcggaggt cagtttagtt ggtaaggcaa gaggagc        297
```

<210> 64
<211> 300
<212> DNA
<213> Homo sapien

<400> 64

```
gcactgagag gaacttccaa tactatgttg aataggagtg gtgagagagg gcatccttgt      60
```

```
cttgtgccgg ttttcaaagg gaatgcttcc agcttttgcc cattcagtat aatattaaag    120
aatgttttac cattttctgt cttgcctgtt tttctgtgtt tttgttggtc tcttcattct    180
ccattttttag gcctttacat gttaggaata tatttctttt aatgatactt cacctttggt    240
atcttttgtg agactctact catagtgtga taagcactgg gttggtaagg caagaggagc    300


        <210> 65
        <211> 203
        <212> DNA
        <213> Homo sapien


        <400> 65
gctcctcttg ccttaccaac tcacccagta tgtcagcaat tttatcrgct ttacctacga     60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt    120
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcctagaaca tgcatttarg    180
tcgatagaag ttcctctcag tgc                                            203


        <210> 66
        <211> 344
        <212> DNA
        <213> Homo sapien


        <400> 66
tacggggacc cctgcattga gaaagcgaga ctcactctga agctgaaatg ctgttgccct     60
tgcagtgctg gtagcaggag ttctgtgctt tgtgggctaa ggctcctgga tgacccctga    120
catggagaag gcagagttgt gtgccccttc tcatggcctc gtcaaggcat catggactgc    180
cacacacaaa atgccgtttt tattaacgac atgaaattga aggagagaac acaattcact    240
gatgtggctc gtaaccatgg atatggtcac atacagaggt gtgattatgt aaaggttaat    300
tccacccacc tcatgtggaa actagcctca atgcaggggt ccca                    344


        <210> 67
        <211> 157
        <212> DNA
        <213> Homo sapien


        <400> 67
gcactgagag gaacttcgta gggaggttga actggctgct gaggaggggg aacaacaggg     60
taaccagact gatagccatt ggatggataa tatggtggtt gaggagggac actacttata    120
gcagagggtt gtgtatagcc tgaggaggca tcacccg                            157


        <210> 68
        <211> 137
        <212> DNA
        <213> Homo sapien


        <400> 68
gcactgagag gaacttctag aaagtgaaag tctagacata aaataaaata aaaatttaaa     60
actcaggaga gacagcccag cacggtggct cacgcctgta atcccagaac tttgggagcc    120
tgaggaggca tcacccg                                                  137


        <210> 69
        <211> 137
```

```
<212> DNA
<213> Homo sapien

<400> 69
cgggtgatgc ctcctcaggc tgtatttttga agactatcga ctggacttct tatcaactga    60
agaatccgtt aaaaatacca gttgtattat ttctacctgt caaaatccat ttcaaatgtt   120
gaagttcctc tcagtgc                                                   137


<210> 70
<211> 220
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(220)
<223> n = A,T,C or G

<400> 70
agcatgttga gcccagacac gcaatctgaa tgagtgtgca cctcaagtaa atgtctacac    60
gctgcctggt ctgacatggc acaccatcnc gtggagggca casctctgct cngcctacwa   120
cgagggcant ctcatwgaca ggttccaccc accaaactgc aagaggctca nnaagtactr   180
ccagggtmya sggacmasgg tgggaytyca ycacwcatct                         220


<210> 71
<211> 353
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 71
cgttagggtc tctatccact gctaaaccat acacctgggt aaacagggac catttaacat    60
tcccanctaa atatgccaag tgacttcaca tgtttatctt aaagatgtcc aaaacgcaac   120
tgattttctc ccctaaacct gtgatggtgg gatgattaan cctgagtggt ctacagcaag   180
ttaagtgcaa ggtgctaaat gaangtgacc tgagatacag catctacaag gcagtacctc   240
tcaacncagg gcaactttgc ttctcanagg gcatttagca gtgtctgaag taatttctgt   300
attacaactc acggggcggg gggtgaatat ctantggana gnagaccata acg          353


<210> 72
<211> 343
<212> DNA
<213> Homo sapien

<400> 72
gcactgagag gaacttccaa tacyatkatc agagtgaaca rgcarccyac agaacaggag    60
aaaatgttyg caatctctcc atctgacaaa aggctaatat ccagawtcta awaggaactt   120
aaacaaattt atgagaaaag aacaracaac ctcawcaaaa agtgggtgaa ggawatgcts   180
```

```
aaargaagac atytattcag ccagtaaaca yatgaaaaaa aggctcatsa tcactgawca      240
ttagagaaat gcaaatcaaa accacaatga gataccatct yayrccagtt agaayggtga      300
tcattaaaar stcaggaaac aacagatgct ggacaaggtg tca                       343
```

```
        <210> 73
        <211> 321
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(321)
        <223> n = A,T,C or G

        <400> 73
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac       60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt      120
tcaaagttcc catgctgcca aagtgccatc ctttggggta ctgttttctg agctccagtg      180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaaggtgg      240
cttgagttca gccttaaata ccatcttgaa atgacacaga gaaagaanga tgttgggtgg      300
gagtggatag agaccctaac g                                               321
```

```
        <210> 74
        <211> 321
        <212> DNA
        <213> Homo sapien

        <400> 74
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac       60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt      120
tcaaagttcc catgctgcca aagtgccatc ctttggggta ctgttttctg agctccagtg      180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaaggtgg      240
cttgagttca gycttaaata ccatcttgaa atgamacaga gaaagaagga tgttgggtgg      300
gagtggatag agaccctaac g                                               321
```

```
        <210> 75
        <211> 317
        <212> DNA
        <213> Homo sapien

        <400> 75
gcactgagag gaacttccac atgcactgag aaatgcatgt tcacaaggac tgaagtctgg       60
aactcagttt ctcagttcca atcctgattc aggtgtttac cagctacaca accttaagca      120
agtcagataa ccttagcttc ctcatatgca aaatgagaat gaaaagtact catcgctgaa      180
ttgttttgag gattagaaaa acatctggca tgcagtagaa attcaattag tattcatttt      240
cattcttcta aattaaacaa ataggatttt tagtggtgga acttcagaca ccagaaatgg      300
gagtggatag agaccct                                                    317
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        <210> 76
        <211> 244
        <212> DNA
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<213> Homo sapien

<400> 76

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catactttaa gttctgggat acacgtgcag catgcgcagg tttgttgcat aggtatacac     120
ttgccatggt ggtttgctgc acccatcagt ccatcatcta cattaggtat ttctcctaat     180
gctatccctc ccctagcccc ttacacccc aacaggctct agtgtgtgaa gttcctctca       240
gtgc                                                                  244
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<210> 77
<211> 254
<212> DNA
<213> Homo sapien

<400> 77

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cgttagggtc tctatccact gaaatctgaa gcacaggagg aagagaagca gtyctagtga     60
gatggcaagt tcwtttacca cactctttaa catttygttt agttttaacc tttatttatg     120
gataataaag gttaatatta ataatgattt attttaaggc attcccraat ttgcataatt     180
ctccttttgg agataccctt ttatctccag tgcaagtctg gatcaaagtg atasamagaa     240
gttcctctca gtgc                                                       254
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<210> 78
<211> 355
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 78

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ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt     60
ccggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc     120
cctgaggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg     180
attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag     240
ttcctgtaga nggcccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat      300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa           355
```

<210> 79
<211> 406
<212> DNA
<213> Homo sapien

<400> 79

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taagagggta ccagcagaaa ggttagtatc atcagatagc atcttatacg agtaatatgc     60
ctgctatttg aagtgtaatt gagaaggaaa attttagcgt gctcactgac ctgcctgtag     120
ccccagtgac agctaggatg tgcattctcc agccatcaag agactgagtc aagttgttcc     180
ttaagtcaga acagcagact cagctctgac attctgattc gaatgacact gttcaggaat     240
cggaatcctg tcgattagac tggacagctt gtggcaagtg aatttgcctg taacaagcca     300
gatttttaa aatttatatt gtaaataatg tgtgtgtgtg tgtgtgtata tatatatata     360
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```
tgtacagtta tctaagttaa tttaaaagtt gtttggtacc ctctta                406
```

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<210> 80
<211> 327
<212> DNA
<213> Homo sapien

<400> 80
tttttttttt tttactcggc tcagtctaat cctttttgta gtcactcata ggccagactt     60
agggctagga tgatgattaa taagagggat gacataacta ttagtggcag gttagttgtt    120
tgtagggctc atggtagggg taaaaggagg gcaatttcta gatcaaataa taagaaggta    180
atagctacta agaagaattt tatggagaaa gggacgcggg cggggatat agggtcgaag     240
ccgcactcgt aaggggtgga tttttctatg tagccgttga gttgtggtag tcaaaatgta    300
ataattatta gtagtaagcc taggaga                                        327
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<210> 81
<211> 318
<212> DNA
<213> Homo sapien

<400> 81
tagtctatgc ggttgattcg gcaatccatt atttgctgga ttttgtcatg tgttttgcca     60
attgcattca taatttatta tgcatttatg cttgtatctc ctaagtcatg gtatataatc    120
catgctttt atgttttgtc tgacataaac tcttatcaga gccctttgca cacagggatt     180
caataaatat taacacagtc tacatttatt tggtgaatat tgcatatctg ctgtactgaa    240
agcacattaa gtaacaaagg caagtgagaa gaatgaaaag cactactcac aacagttatc    300
atgattgcgc atagacta                                                  318
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<210> 82
<211> 338
<212> DNA
<213> Homo sapien

<400> 82
tcttcaacct ctactcccac taatagcttt ttgatgactt ctagcaagcc tcgctaacct     60
cgccttaccc cccactatta acctactggg agaactctct gtgctagtaa ccacgttctc    120
ctgatcaaat atcactctcc tacttacagg actcaacata ctagtcacag ccctatactc    180
cctctacata tttaccacaa cacaatgggg ctcactcacc caccacatta acaacataaa    240
accctcattc acacgagaaa acaccctcat gttcatacac ctatccccca ttctcctcct    300
atccctcaac cccgacatca ttaccgggtt ttcctctt                            338
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<210> 83
<211> 111
<212> DNA
<213> Homo sapien

<400> 83
agccatttac cacccatcca caaaaaaaaa aaaaaaaaag aaaaatatca aggaataaaa     60
atagactttg aacaaaaagg aacatttgct ggcctgagga ggcatcaccc g             111
```

```
<210> 84
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<211> 224
<212> DNA
<213> Homo sapien

<400> 84
tcgggtgatg cctcctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa   60
aaggaagaaa ggagaaaaaa gggcatcatc cccgttccga agggtcaggg aggaggaaat   120
tgaggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga   180
ctggggagag cgagccaatc aggttttgaa gttcctctca gtgc   224

<210> 85
<211> 348
<212> DNA
<213> Homo sapien

<400> 85
gcactgagag gaacttcgtt ggaaacgggt tttttcatg taaggctaga cagaagaatt   60
ctcagtaact tccttgtgtt gtgtgtattc aactcacasa gttgaacgat cctttacaca   120
gagcagactt gtaacactct twttgtggaa tttgcaagtg gagatttcag scgctttgaa   180
gtsaaaggta gaaaaggaaa tatcttccta taaaaactag acagaatgat tctcagaaac   240
tcctttgtga tgtgtgcgtt caactcacag agtttaacct ttcwtttcat agaagcagtt   300
aggaaacact ctgtttgtaa agtctgcaag tggatagaga ccctaacg   348

<210> 86
<211> 293
<212> DNA
<213> Homo sapien

<400> 86
gcactgagag gaacttcytt gtgwtgtktg yattcaactc acagagttga asswtsmttt   60
acabagwkca ggcttkcaaa cactcttttt gtmgaatytg caagwggaka tttsrrccrc   120
tttgwggycw wysktmgaaw mggrwatatc ttcwyatmra amctagacag aaksattctc   180
akaawstyyy ytgtgawgws tgcrttcaac tcacagagkt kaacmwtyct kytsatrgag   240
cagttwkgaa actctmtttc tttggattct gcaagtggat agagacccta acg   293

<210> 87
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 87
ctcctaggct   10

<210> 88
<211> 10
<212> DNA
<213> Artificial Sequence

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    <223> Primer for amplification from breast tumor cDNA

    <400> 88
agtagttgcc                                                      10


    <210> 89
    <211> 11
    <212> DNA
    <213> Artificial Sequence


    <220>
    <223> Primer for amplification from breast tumor cDNA

    <400> 89
ttccgttatg c                                                    11


    <210> 90
    <211> 10
    <212> DNA
    <213> Artificial Sequence


    <220>
    <223> Primer for amplification from breast tumor cDNA

    <400> 90
tggtaaaggg                                                      10


    <210> 91
    <211> 10
    <212> DNA
    <213> Artificial Sequence


    <220>
    <223> Primer for amplification from breast tumor cDNA

    <400> 91
tcggtcatag                                                      10


    <210> 92
    <211> 10
    <212> DNA
    <213> Artificial Sequence


    <220>
    <223> Primer for amplification from breast tumor cDNA

    <400> 92
tacaacgagg                                                      10


    <210> 93
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31

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        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 93
tggattggtc                                                          10


        <210> 94
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 94
ctttctaccc                                                          10


        <210> 95
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 95
ttttggctcc                                                          10


        <210> 96
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 96
ggaaccaatc                                                          10


        <210> 97
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA
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32

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tcgatacagg                                                    10

        <210> 98
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
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        <400> 98
ggtactaagg                                                    10

        <210> 99
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 99
agtctatgcg                                                    10

        <210> 100
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 100
ctatccatgg                                                    10

        <210> 101
        <211> 10
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Primer for amplification from breast tumor cDNA

        <400> 101
tctgtccaca                                                    10

        <210> 102
        <211> 10
        <212> DNA
        <213> Artificial Sequence
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<220>
<223> Primer for amplification from breast tumor cDNA

<400> 102
aagagggtac                                                        10


<210> 103
<211> 10
<212> DNA
<213> Artificial Sequence


<220>
<223> Primer for amplification from breast tumor cDNA

<400> 103
cttcaacctc                                                        10


<210> 104
<211> 20
<212> DNA
<213> Artificial Sequence


<220>
<223> Primer for amplification from breast tumor cDNA

<400> 104
gctcctcttg ccttaccaac                                             20


<210> 105
<211> 20
<212> DNA
<213> Artificial Sequence


<220>
<223> Primer for amplification from breast tumor cDNA

<400> 105
gtaagtcgag cagtgtgatg                                             20


<210> 106
<211> 20
<212> DNA
<213> Artificial Sequence


<220>
<223> Primer for amplification from breast tumor cDNA

<400> 106
gtaagtcgag cagtctgatg                                             20
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<210> 107
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 107
gacttagtgg aaagaatgta                                          20


<210> 108
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 108
gtaattccgc caaccgtagt                                          20


<210> 109
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 109
atggttgatc gatagtggaa                                          20


<210> 110
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 110
acggggaccc ctgcattgag                                          20


<210> 111
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA
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tattctagac cattcgctac


     <210> 112
     <211> 20
     <212> DNA
     <213> Artificial Sequence


     <220>
     <223> Primer for amplification from breast tumor cDNA


     <400> 112                                                    20
acataaccac tttagcgttc


     <210> 113
     <211> 20
     <212> DNA
     <213> Artificial Sequence


     <220>
     <223> Primer for amplification from breast tumor cDNA


     <400> 113                                                    20
cgggtgatgc ctcctcaggc


     <210> 114
     <211> 20
     <212> DNA
     <213> Artificial Sequence


     <220>
     <223> Primer for amplification from breast tumor cDNA


     <400> 114                                                    20
agcatgttga gcccagacac


     <210> 115
     <211> 20
     <212> DNA
     <213> Artificial Sequence


     <220>
     <223> Primer for amplification from breast tumor cDNA


     <400> 115                                                    20
gacaccttgt ccagcatctg


     <210> 116
     <211> 20
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<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 116
tacgctgcaa cactgtggag   20

<210> 117
<211> 20
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<220>
<223> Primer for amplification from breast tumor cDNA

<400> 117
cgttagggtc tctatccact   20

<210> 118
<211> 20
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<220>
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<400> 118
agactgactc atgtccccta   20

<210> 119
<211> 20
<212> DNA
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<220>
<223> Primer for amplification from breast tumor cDNA

<400> 119
tcatcgctcg gtgactcaag   20

<210> 120
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 120
caagattcca taggctgacc   20

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<210> 121
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 121
acgtactggt cttgaaggtc                                              20


<210> 122
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 122
gacgcttggc cacttgacac                                             20


<210> 123
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 123
gtatcgacgt agtggtctcc                                             20


<210> 124
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 124
tagtgacatt acgacgctgg                                             20


<210> 125
<211> 20
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<213> Artificial Sequence

<220>
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<223> Primer for amplification from breast tumor cDNA

<400> 125
cgggtgatgc ctcctcaggc   20

<210> 126
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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<400> 126
atggctattt tcgggggctg aca   23

<210> 127
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 127
ccggtatctc ctcgtgggta tt   22

<210> 128
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 128
ctgcctgagc cacaaatg   18

<210> 129
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 129
ccggaggagg aagctagagg aata   24

<210> 130
<211> 14

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<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 130
tttttttttt ttag                                                    14

<210> 131
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Predicited Th Motifs (B-cell epitopes)

<400> 131
Ser Ser Gly Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val
1               5               10              15
Gly Ile


<210> 132
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Predicited Th Motifs (B-cell epitopes)

<221> VARIANT
<222> (1)...(22)
<223> Xaa = Any Amino Acid

<400> 132
Gln Gly Ala Ala Gln Lys Pro Ile Asn Leu Ser Lys Xaa Ile Glu Val
1               5               10              15
Val Gln Gly His Asp Glu
        20


<210> 133
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Predicited Th Motifs (B-cell epitopes)

<400> 133
Ser Pro Gly Val Phe Leu Glu His Leu Gln Glu Ala Tyr Arg Ile Tyr
```

```
1                  5                 10                    15
Thr Pro Phe Asp Leu Ser Ala
                20


        <210> 134
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)


        <400> 134
Tyr Leu Leu Val Gly Ile Gln Gly Ala
 1               5


        <210> 135
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)


        <400> 135
Gly Ala Ala Gln Lys Pro Ile Asn Leu
 1               5


        <210> 136
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)


        <221> VARIANT
        <222> (1)...(9)
        <223> Xaa = Any Amino Acid


        <400> 136
Asn Leu Ser Lys Xaa Ile Glu Val Val
 1               5


        <210> 137
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)
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        <400> 137
Glu Val Val Gln Gly His Asp Glu Ser
  1               5


        <210> 138
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)


        <400> 138
His Leu Gln Glu Ala Tyr Arg Ile Tyr
  1               5


        <210> 139
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)


        <400> 139
Asn Leu Ala Phe Val Ala Gln Ala Ala
  1               5


        <210> 140
        <211> 9
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Predicited HLA A2.1 Motifs (T-cell epitopes)


        <400> 140
Phe Val Ala Gln Ala Ala Pro Asp Ser
  1               5


        <210> 141
        <211> 9388
        <212> DNA
        <213> Homo sapien


        <400> 141
gctcgcggcc gcgagctcaa ttaacccctca ctaaagggag tcgactcgat cagactgtta      60
ctgtgtctat gtagaaagaa gtagacataa gagattccat tttgttctgt actaagaaaa      120
attcttctgc cttgagatgc tgttaatctg taaccctagc cccaaccctg tgctcacaga      180
gacatgtgct gtgttgactc aaggttcaat ggatttaggg ctatgctttg ttaaaaaagt      240
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gcttgaagat aatatgcttg ttaaaagtca tcaccattct ctaatctcaa gtacccaggg        300
acacaataca ctgcggaagg ccgcagggac ctctgtctag gaaagccagg tattgtccaa        360
gatttctccc catgtgatag cctgagatat ggcctcatgg gaagggtaag acctgactgt        420
cccccagccc gacatccccc agcccgacat cccccagccc gacacccgaa aagggtctgt        480
gctgaggagg attagtaaaa gaggaaggcc tctttgcagt tgaggtaaga ggaaggcatc        540
tgtctcctgc tcgtccctgg gcaatagaat gtcttggtgt aaaacccgat tgtatgttct        600
acttactgag ataggagaaa acatccttag ggctggaggt gagacacgct ggcggcaata        660
ctgctcttta atgcaccgag atgtttgtat aagtgcacat caaggcacag cacctttcct        720
taaacttatt tatgacacag agacctttgt tcacgttttc ctgctgaccc tctccccact        780
attaccctat tggcctgcca catccccctc tccgagatgg tagagataat gatcaataaa        840
tactgaggga actcagagac cagtgtccct gtaggtcctc cgtgtgctga gcgccggtcc        900
cttgggctca cttttctttc tctatacttt gtctctgtgt ctctttcttt tctcagtctc        960
tcgttccacc tgacgagaaa tacccacagg tgtggagggg caggccaccc cttcaataat       1020
ttactagcct gttcgctgac aacaagactg gtggtgcaga aggttgggtc ttggtgttca       1080
ccgggtggca ggcatgggcc aggtgggagg gtctccagcg cctggtgcaa atctccaaga       1140
aagtgcagga aacagcacca agggtgattg taaattttga tttggcgcgg caggtagcca       1200
ttccagcgca aaaatgcgca ggaaagcttt tgctgtgctt gtaggcaggt aggccccaag       1260
cacttcttat tggctaatgt ggagggaacc tgcacatcca ttggctgaaa tctccgtcta       1320
tttgaggctg actgagcgcg ttcctttctt ctgtgttgcc tggaaacgga ctgtctgcct       1380
agtaacatct gatcacgttt cccattggcc gccgtttccg gaagcccgcc ctcccatttc       1440
cggaagcctg gcgcaaggtt ggtctgcagg tggcctccag gtgcaaagtg ggaagtgtga       1500
gtcctcagtc ttgggctatt cggccacgtg cctgccggac atgggacgct ggagggtcag       1560
cagcgtggag tcctggcctt ttgcgtccac gggtgggaaa ttggccattg ccacggcggg       1620
aactgggact caggctgccc cccggccgtt tctcatccgt ccaccggact cgtgggcgct       1680
cgcactggcg ctgatgtagt ttcctgacct ctgacccgta ttgtctccag attaaaggta       1740
aaaacggggc tttttcagcc cactcgggta aaacgccttt tgatttctag gcaggtgttt       1800
tgttgcacgc ctgggaggga gtgacccgca ggttgaggtt tattaaaata cattcctggt       1860
ttatgttatg tttataataa agcaccccaa cctttacaaa atctcacttt ttgccagttg       1920
tattatttag tggactgtct ctgataagga cagccagtta aaatggaatt ttgttgttgc       1980
taattaaacc aatttttagt tttggtgttt gtcctaatag caacaacttc tcaggctttta      2040
taaaaccata tttcttgggg gaaatttctg tgtaaggcac agcgagttag tttggaattg      2100
tttaaagga agtaagttcc tggttttgat atcttagtag tgtaatgccc aacctggttt       2160
ttactaaccc tgttttaga ctctcccttt ccttaaatca cctagccttg tttccacctg       2220
aattgactct cccttagcta agagcgccag atggactcca tcttggctct ttcactggca      2280
gccccttcct caaggactta acttgtgcaa gctgactccc agcacatcca agaatgcaat      2340
taactgttaa gatactgtgg caagctatat ccgcagttcc gaggaattca tccgattgat      2400
tatgcccaaa agccccgcgt ctatcacctt gtaataatct taaagcccct gcacctggaa      2460
ctattaactt tcctgtaacc atttatcctt ttaactttt tgcttacttt atttctgtaa       2520
aattgtttta actagacctc ccctcccctt tctaaaccaa agtataaaag aagatctagc      2580
cccttcttca gagcggagag aattttgagc attagccatc tcttggcggc cagctaaata     2640
aatggacttt taatttgtct caaagtgtgg cgttttctct aactcgctca ggtacgacat      2700
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<210> 142
<211> 419
<212> DNA
<213> Homo sapien

<400> 142
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tcactgcctc ctaatgtcat gaggtacact gagcagaatt aaacagggta gtcttaacca     120
cactattttt agctaccttg tcaagctaat ggttaaagaa cactttggt ttacacttgt      180
tgggtcatag aagttgcttt ccgccatcac gcaataagtt tgtgtgtaat cagaaggagt     240
taccttatgg tttcagtgtc attctttagt taacttggga gctgtgtaat ttaggctttg     300
cgtattattt cacttctgtt ctccacttat gaagtgattg tgtgttcgcg tgtgtgtgcg     360
tgcgcatgtg cttccggcag ttaacataag caaatacca acatcacact gctcgactt      419
```

<210> 143
<211> 402
<212> DNA
<213> Homo sapien

<400> 143
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tgtaagtcga gcagtgtgat gtccactgca gtgtgttgct gggaacagtt aatgagcaaa      60
ttgtatacaa tggctagtac attgaccggg atttgttgaa gctggtgagt gttatgactt     120
agcctgttag actagtctat gcacatggct ctggtcaact accgctctct catttctcca     180
gataaatccc ccatgcttta tattctcttc caaacatact atcctcatca ccacatagtt     240
cctttgttaa tgctttgttc tagactttcc cttttctgtt ttcttattca aacctatatc     300
tctttgcata gattgtaaat tcaaatgccc tcagggtgca ggcagttcat gtaagggagg     360
gaggctagcc agtgagatct gcatcacact gctcgactta ca                       402
```

<210> 144
<211> 224
<212> DNA
<213> Homo sapien

<400> 144
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tcgggtgatg cctcctcagg ccaagaagat aaagcttcag accccctaaca catttccaaa      60
aaggaagaaa ggagaaaaaa gggcatcatc cccgttccga agggtcaggg aggaggaaat     120
tgaggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga     180
ctggggagag cgagccaatc aggttttgaa gttcctctca gtgc                     224
```

<210> 145
<211> 111
<212> DNA
<213> Homo sapien

<400> 145
```
agccatttac cacccatcca caaaaaaaaa aaaaaaaag aaaaatatca aggaataaaa       60
atagactttg aacaaaagg aacatttgct ggcctgagga ggcatcaccc g              111
```

<210> 146
<211> 585

<212> DNA
<213> Homo sapien

<400> 146
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tagcatgttg agcccagaca cttgtagaga gaggaggaca gttagaagaa gaagaaaagt    60
ttttaaatgc tgaaagttac tataagaaag ctttggcttt ggatgagact tttaaagatg   120
cagaggatgc tttgcagaaa cttcataaat atatgcaggt gattccttat ttcctcctag   180
aaatttagtg atatttgaaa taatgcccaa acttaatttt ctcctgagga aaactattct   240
acattactta agtaaggcat tatgaaaagt ttctttttag gtatagtttt tcctaattgg   300
gtttgacatt gcttcatagt gcctctgttt ttgtccataa tcgaaagtaa agatagctgt   360
gagaaaacta ttacctaaat ttggtatgtt gttttgagaa atgtccttat agggagctca   420
cctggtggtt tttaaattat tgttgctact ataattgagc taattataaa aacctttttg   480
agacatattt taaattgtct tttcctgtaa tactgatgat gatgttttct catgcatttt   540
cttctgaatt gggaccattg ctgctgtgtc tgggctcaca tgcta                   585
```

<210> 147
<211> 579
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(579)
<223> n = A,T,C or G

<400> 147
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aagcgtgttt gtctgtgaag gaccctgacg tcacctgcca ggctagggag gggtcaatgt   120
ggagtgaatg ttcaccgact ttcgcaggag tgtgcagaag ccaggtgcaa cttggtttgc   180
ttgtgttcat caccccctcaa gatatgcaca ctgctttcca aataaagcat caactgtcat   240
ctccagatgg ggaagacttt ttctccaacc agcaggcagg tccccatcca ctcagacacc   300
agcacgtcca ccttctcggg cagcaccacg tcctccacct tctgctggta cacggtgatg   360
atgtcagcaa agccgttctg cangaccagc tgccccgtgt gctgtgccat ctcactggcc   420
tccaccgcgt acaccgctct aggccgcgca tantgtgcac agaanaaatg atgatccagt   480
cccacagccc acgtccaaga ngactttatc cgtcagggat tctttattct gcaggatgac   540
ctgtggtatt aattgttcgt gtctgggctc aacatgcta                          579
```

<210> 148
<211> 249
<212> DNA
<213> Homo sapien

<400> 148
```
tgacaccttg tccagcatct gcaagccagg aagagagtcc tcaccaagat ccccaccccg    60
ttggcaccag gatcttggac ttccaatctc cagaactgtg agaaataagt atttgtcgct   120
aaataaatct ttgtggtttc agatatttag ctatagcaga tcaggctgac taagagaaac   180
cccataagag ttacatactc attaatctcc gtctctatcc ccaggtctca gatgctggac   240
aaggtgtca                                                           249
```

<210> 149
<211> 255

```
        <212> DNA
        <213> Homo sapien

        <400> 149
tgacaccttg tccagcatct gctattttgt gacttttttaa taatagccat tctgactggt      60
gtgagatggt aactcattgt gggtttggtc tgcatttctc taatgatcag tgatattaag     120
cttttttttaa atatgcttgt tgaccacatg tatatcatct tttgagaagt gtctgttcat     180
atcctttgcc cactttttaa ttttttttatc ttgtaaattt gtttaatttc cttacagatg     240
ctggacaagg tgtca                                                      255


        <210> 150
        <211> 318
        <212> DNA
        <213> Homo sapien


        <400> 150
ttacgctgca acactgtgga ggccaagctg ggatcacttc ttcattctaa ctggagagga      60
gggaagttca agtccagcag agggtggggtg ggtagacagt ggcactcaga aatgtcagct     120
ggacccctgt ccccgcatag gcaggacagc aaggctgtgg ctctccaggg ccagctgaag     180
aacaggacac tgtctccgct gccacaaagc gtcagagact cccatctttg aagcacggcc     240
ttcttggtct tcctgcactt ccctgttctg ttagagacct ggttatagac aaggcttctc     300
cacagtgttg cagcgtaa                                                   318


        <210> 151
        <211> 323
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(323)
        <223> n = A,T,C or G


        <400> 151tnacgcngcn acnntgtaga ganggnaagg cnttccccac attncccctt
catnanagaa        60
ttattcnacc aagnntgacc natgccnttt atgacttaca tgcnnactnc ntaatctgtn     120
tcnngcctta aaagcnnntc cactacatgc ntcancactg tntgtgtnac ntcatnaact     180
gtcngnaata ggggcncata actacagaaa tgcanttcat actgcttcca ntgccatcng     240
cgtgtggcct tncctactct tcttntattc caagtagcat ctctggantg cttccccact     300
ctccacattg ttgcagcnat aat                                            323


        <210> 152
        <211> 311
        <212> DNA
        <213> Homo sapien


        <400> 152
tcaagattcc ataggctgac cagtccaagg agagttgaaa tcatgaagga gagtctatct      60
ggagagagct gtagttttga gggttgcaaa gacttaggat ggagttggtg ggtgtggtta     120
gtctctaagg ttgattttgt tcataaattt catgccctga atgccttgct tgcctcaccc     180
tggtccaagc cttagtgaac acctaaaagt ctctgtcttc ttgctctcca aacttctcct     240
```

```
gaggatttcc tcagattgtc tacattcaga tcgaagccag ttggcaaaca agatgcagtc      300
cagagggtca g                                                            311
```

```
        <210> 153
        <211> 332
        <212> DNA
        <213> Homo sapien

        <400> 153
caagattcca taggctgacc aggaggctat tcaagatctc tggcagttga ggaagtctct       60
ttaagaaaat agtttaaaca atttgttaaa atttttctgt cttacttcat ttctgtagca      120
gttgatatct ggctgtcctt tttataatgc agagtgggaa ctttccctac catgtttgat      180
aaatgttgtc caggctccat tgccaataat gtgttgtcca aaatgcctgt ttagttttta      240
aagacggaac tccacccttt gcttggtctt aagtatgtat ggaatgttat dataggacat      300
agtagtagcg gtggtcagcc tatggaatct tg                                    332
```

```
        <210> 154
        <211> 345
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(345)
        <223> n = A,T,C or G

        <400> 154
tcaagattcc ataggctgac ctggacagag atctcctggg tctggcccag gacagcaggc       60
tcaagctcag tggagaaggt ttccatgacc ctcagattcc cccaaacctt ggattgggtg      120
acattgcatc tcctcagaga gggaggagat gtangtctgg gcttccacag ggacctggta      180
ttttaggatc agggtaccgc tggcctgagg cttggatcat tcanagcctg ggggtggaat      240
ggctggcagc ctgtggcccc attgaaatag gctctggggc actccctctg ttcctanttg      300
aacttgggta aggaacagga atgtggtcan cctatggaat cttga                      345
```

```
        <210> 155
        <211> 295
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(295)
        <223> n = A,T,C or G

        <400> 155
gacgcttggc cacttgacac attaaacagt tttgcataat cactancatg tatttctagt       60
ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgatggc aagcataatc      120
aaacgctgtt ctgttaattc caagttataa ctggcattga ttaaagcatt atctttcaca      180
actaaactgt tcttcatana acagcccata ttattatcaa attaagagac aatgtattcc      240
aatatccttt anggccaata tatttnatgt cccttaatta agagctactg tccgt           295
```

```
<210> 156
<211> 406
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 156
gacgcttggc cacttgacac tgcagtggga aaaccagcat gagccgctgc ccccaaggaa      60
cctcgaagcc caggcagagg accagccatc ccagcctgca ggtaaagtgt gtcacctgtc     120
aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaagggggtg tnaatgtnta     180
tgcgtgtgag catgagtgat ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg     240
cgggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt     300
tgaaagtctg tgtgtgtgcg tgtggtcatg anggtaantt antgactgcg caggatgtgt     360
gagtgtgcat ggaacactca ntgtgtgtgt caagtggccn ancgtc                    406


<210> 157
<211> 208
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 157
tgacgcttgg ccacttgaca cactaaaggg tgttactcat cactttcttc tctcctcggt      60
ggcatgtgag tgcatctatt cacttggcac tcatttgttt ggcagtgact gtaanccana     120
tctgatgcat acaccagctt gtaaattgaa taaatgtctc taatactatg tgctcacaat     180
anggtanggg tgaggagaag gggagaga                                        208


<210> 158
<211> 547
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(547)
<223> n = A,T,C or G

<400> 158
cttcaacctc cttcaacctc cttcaacctc ctggattcaa acaatcatcc cacctcagac      60
tccttagtag ctgagactac agactcacgc cactacatct ggctaaattt ttgtagagat     120
agggtttcat catgttgccc tggctggtct caaactcctg acctcaagca atgtgcccac     180
ctcagcctcc caaagtgctg ggattacagg cataagccac catgcccagt ccatntttaa     240
tctttcctac cacattctta ccacactttc ttttatgttt agatacataa atgcttacca     300
```

```
ttatgataca attgcccaca gtattaagac agtaacatgc tgcacaggtt tgtagcctag      360
gaacagtagg caataccaca tagcttaggt gtgtggtaga ctataccatc taggtttgtg      420
taagttacac tttatgctgt ttacacaatg acaaaaccat ctaatgatgc atttctcaga      480
atgtatcctt gtcagtaagc tatgatgtac agggaacact gcccaaggac acagatattg      540
tacctgt                                                                547
```

```
        <210> 159
        <211> 203
        <212> DNA
        <213> Homo sapien

        <400> 159
gctcctcttg ccttaccaac tcacccagta tgtcagcaat tttatcrgct ttacctacga       60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt      120
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcctagaaca tgcatttarg      180
tcgatagaag ttcctctcag tgc                                              203
```

```
        <210> 160
        <211> 402
        <212> DNA
        <213> Homo sapien

        <400> 160
tgtaagtcga gcagtgtgat gggtggaaca gggttgtaag cagtaattgc aaactgtatt       60
taaacaataa taataatatt tagcatttat agagcacttt atatcttcaa agtacttgca      120
aacattayct aattaaatac cctctctgat tataatctgg atacaaatgc acttaaactc      180
aggacagggt catgagaraa gtatgcattt gaaagttggt gctagctatg ctttaaaaac      240
ctatacaatg atgggraagt tagagttcag attctgttgg actgtttttg tgcatttcag      300
ttcagcctga tggcagaatt agatcatatc tgcactcgat gactytgctt gataacttat      360
cactgaaatc tgagtgttga tcatcacact gctcgactta ca                        402
```

```
        <210> 161
        <211> 193
        <212> DNA
        <213> Homo sapien

        <400> 161
agcatgttga gcccagacac tgaccaggag aaaaaccaac caatagaaac acgcccagac       60
actgaccagg agaaaaacca accaataaaa acaggcccgg acataagaca aataataaaa      120
ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggt gtgtgtctgg      180
gctcaacatg cta                                                        193
```

```
        <210> 162
        <211> 147
        <212> DNA
        <213> Homo sapien

        <400> 162
tgttgagccc agacactgac caggagaaaa accaaccaat aaaaacaggc ccggacataa       60
gacaaataat aaaattagcg gacaaggaca tgaaaacagc tattgtaaga gcggatatag      120
tggtgtgtgt ctgggctcaa catgcta                                          147
```

<210> 163
<211> 294
<212> DNA
<213> Homo sapien

<400> 163
```
tagcatgttg agcccagaca caaatctttc cttaagcaat aaatcatttc tgcatatgtt      60
tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tattttgatt     120
tgggttctta tctccctcac attatcttca tttctatcat tgacctctta tcccagagac     180
tctcaaactt ttatgttata caaatcacat tctgtctcaa aaaatatctc acccacttct     240
cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta          294
```

<210> 164
<211> 412
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(412)
<223> n = A,T,C or G

<400> 164
```
cgggattggc tttgagctgc agatgctgcc tgtgaccgca cccggcgtgg aacagaaagc      60
cacctggctg caagtgcgcc agagccgccc tgactacgtg ctgctgtggg gctggggcgt     120
gatgaactcc accgccctga aggaagccca ggccaccgga tacccccgcg acaagatgta     180
cggcgtgtgg tgggccggtg cggagcccga tgtgcgtgac gtgggcgaag cgccaaggg     240
ctacaacgcg ctggctctga acggctacgg cacgcagtcc aaggtgatcc angacatcct     300
gaaacacgtg cacgacaagg gccagggcac ggggcccaaa gacgaagtgg gctcggtgct     360
gtacacccgc ggcgtgatca tccagatgct ggacaaggtg tcaatcacta at            412
```

<210> 165
<211> 361
<212> DNA
<213> Homo sapien

<400> 165
```
ttgacacctt gtccagcatc tgcatctgat gagagcctca gatggctacc actaatggca      60
gaaggcaaag gagaacaggc attgtatggc aagaaaggaa gaaagagaga ggggagaaag     120
gtgctaggtt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca     180
ggtgtggtga ctccaaccag taatcccaac attttaggag gctgaggcag gcagatgtct     240
tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat     300
tacaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg acaaggtgtc     360
a                                                                      361
```

<210> 166
<211> 427
<212> DNA
<213> Homo sapien

<400> 166

```
twgactgact catgtcccct acacccaact atcttctcca ggtggccagg catgatagaa       60
tctgatcctg acttagggga atattttctt tttacttccc atcttgattc cctgccggtg      120
agtttcctgg ttcagggtaa gaaaggagct caggccaaag taatgaacaa atccatcctc      180
acagacgtac agaataagag aacwtggacw tagccagcag aacmcaaktg aaamcagaac      240
mcttamctag gatracaamc mcrraratar ktgcycmcmc wtataataga aaccaaactt      300
gtatctaatt aaatatttat ccacygtcag ggcattagtg gttttgataa atacgctttg      360
gctaggattc ctgaggttag aatggaaraa caattgcamc gagggtaggg gacatgagtc      420
aktctaa                                                              427
```

        <210> 167
        <211> 500
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(500)
        <223> n = A,T,C or G

        <400> 167

```
aacgtcgcat gctcccggcc gccatggccg cgggatagac tgactcatgt cccctaagat       60
agaggagaca cctgctaggt gtaaggagaa gatggttagg tctacggagg ctccagggtg      120
ggagtagttc cctgctaagg gagggtagac tgttcaacct gttcctgctc cggcctccac      180
tatagcagat gcgagcagga gtaggagaga gggaggtaag agtcagaagc ttatgttgtt      240
tatgcgggga aacgccrtat cggggcagc cragttatta ggggacantr tagwyartcw      300
agntagcatc caaagcgngg gagttntccc atatggttgg acctgcaggc ggccgcatta      360
gtgattagca tgtgagcccc agacacgcat agcaacaagg acctaaactc agatcctgtg      420
ctgattactt aacatgaatt attgtattta tttaacaact ttgagttatg aggcatatta      480
ttaggtccat attacctgga                                                500
```

        <210> 168
        <211> 358
        <212> DNA
        <213> Homo sapien

        <400> 168

```
ttcatcgctc ggtgactcaa gcctgtaatc ccagaacttt gggaggccga ggggagcaga       60
tcacctgagg ttgggagttt gagaccagcc tggccaacat ggtgacaacc cgtctctgct      120
aaaaatacaa aaattagcca agcatggtgg catgcacttg taatcccagc tactcgggag      180
gctgaggcag gagaatcact tgaggccagg aggcagaggt tgcagtgagg cagaggttga      240
gatcatgcca ctgcactcca gcctgggcaa cagagtaaga ctccatctca aaaaaaaaaa      300
aaaaaagaa tgatcagagc cacaaataca gaaaccttg agtcaccgag cgatgaaa         358
```

        <210> 169
        <211> 1265
        <212> DNA
        <213> Homo sapien

        <400> 169

```
ttctgtccac accaatctta gagctctgaa agaatttgtc tttaaatatc ttttaatagt       60
```

```
aacatgtatt ttatggacca aattgacatt ttcgactatt ttttcccaaa aaaagtcagg    120
tgaatttcag cacactgagt tgggaatttc ttatcccaga agwcggcacg agcaatttca    180
tatttattta agattgattc catactccgt tttcaaggag aatccctgca gtctccttaa    240
aggtagaaca aatactttct attttttttt caccattgtg ggattggact ttaagaggtg    300
actctaaaaa aacagagaac aaatatgtct cagttgtatt aagcacggac ccatattatc    360
atattcactt aaaaaaatga tttcctgtgc accttttggc aacttctctt ttcaatgtag    420
ggaaaaactt agtcaccctg aaaacccaca aaataaataa aacttgtaga tgtgggcaga    480
argtttgggg gtggacattg tatgtgttta aattaaaccc tgtatcactg agaagctgtt    540
gtatgggtca gagaaaatga atgcttagaa gctgttcaca tcttcaagag cagaagcaaa    600
ccacatgtct cagctatatt attatttatt ttttatgcat aaagtgaatc atttcttctg    660
tattaatttc caaagggttt taccctctat ttaaatgctt tgaaaaacag tgcattgaca    720
atgggttgat attttttcttt aaaagaaaaa tataattatg aaagccaaga taatctgaag    780
cctgttttat tttaaaactt tttatgttct gtggttgatg ttgtttgttt gtttgtttct    840
attttgttgg ttttttactt tgttttttgt tttgttttgt tttggtttdg catactacat    900
gcagtttctt taaccaatgt ctgtttggct aatgtaatta aagttgttaa tttatatgag    960
tgcatttcaa ctatgtcaat ggtttcttaa tatttattgt gtagaagtac tggtaatttt   1020
tttatttaca atatgtttaa agagataaca gtttgatatg ttttcatgtg tttatagcag   1080
aagttatttta tttctatggc attccagcgg atattttggt gtttgcgagg catgcagtca   1140
atattttgta cagttagtgg acagtattca gcaacgcctg atagcttctt tggccttatg   1200
ttaaataaaa agacctgttt gggatgtaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa   1260
aaaaa                                                            1265


        <210> 170
        <211> 383
        <212> DNA
        <213> Homo sapien

        <400> 170
tgtaagtcga gcagtgtgat gacgatattc ttcttattaa tgtggtaatt gaacaaatga     60
tctgtgatac tgatcctgag ctaggaggcg ctgttcagtt aatgggactt cttcgtactc    120
taattgatcc agagaacatg ctggctacaa ctaataaaac cgaaaaaagt gaatttctaa    180
attttttcta caaccattgt atgcatgttc tcacagcacc actttgacc aatacttcag    240
aagacaaatg tgaaaaggat aatatagttg gatcaaacaa aaacaacaca atttgtcccg    300
ataattatca aacagcacag ctacttgcct taatttaga gttactcaca ttttgtgtgg    360
aacatcacac tgctcgactt aca                                           383


        <210> 171
        <211> 383
        <212> DNA
        <213> Homo sapien

        <400> 171
tgggcacctt caatatcgca agttaaaaat aatgttgagt ttattatact tttgacctgt     60
ttagctcaac agggtgaagg catgtaaaga atgtggactt ctgaggaatt ttcttttaaa    120
aagaacataa tgaagtaaca ttttaattac tcaaggacta cttttggttg aagtttataa    180
tctagatacc tctactttt gttttttgctg ttcgacagtt cacaaagacc ttcagcaatt    240
tacagggtaa aatcgttgaa gtagtggagg tgaaactgaa atttaaaatt attctgtaaa    300
tactataggg aaagaggctg agcttagaat cttttggttg ttcatgtgtt ctgtgctctt    360
atcatcacac tgctcgactt aca                                           383


        <210> 172
```

<211> 699
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(699)
<223> n = A,T,C or G

<400> 172
```
tcgggtgatg cctcctcagg cttgtcgtta gtgtacacag agctgctcat gaagcgacag      60
cggctgcccc tggcacttca gaacctcttc ctctacactt ttggtgcgct tctgaatcta     120
ggtctgcatg ctggcggcgg ctctggccca ggcctcctgg aaagtttctc aggatgggca     180
gcactcgtgg tgctgagcca ggcactaaat ggactgctca tgtctgctgt catggagcat     240
ggcagcagca tcacacgcct ctttgtggtg tcctgctcgc tggtggtcaa cgccgtgctc     300
tcagcagtcc tgctacggct gcagctcaca gccgccttct tcctggccac attgctcatt     360
ggcctggcca tgcgcctgta ctatggcagc cgctagtccc tgacaacttc caccctgatt     420
ccggaccctg tagattgggc gccaccacca gatccccctc ccaggccttc ctccctctcc     480
catcagcggc cctgtaacaa gtgccttgtg agaaaagctg gagaagtgag ggcagccagg     540
ttattctctg gaggttggtg gatgaagggg tacccctagg agatgtgaag tgtgggtttg     600
gttaaggaaa tgcttaccat cccccacccc caaccaagtt nttccagact aaagaattaa     660
ggtaacatca atacctaggc ctgaggaggc atcacccga                            699
```

<210> 173
<211> 701
<212> DNA
<213> Homo sapien

<400> 173
```
tcgggtgatg cctcctcagg ccagatcaaa cttggggttg aaaactgtgc aaagaaatca      60
atgtcggaga aagaattttg caaaagaaaa atgcctaatc agtactaatt taataggtca     120
cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag     180
tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg     240
gaaagaactt ttcaatttat agcatcttaa ttgctcagga ttttaaattt tgataaagaa     300
agctccactt ttggcaggag taggggcag ggagagagga ggctccatcc acaaggacag      360
agacaccagg gccagtaggg tagctggtgg ctggatcagt cacaacggac tgacttatgc     420
catgagaaga aacaacctcc aaatctcagt tgcttaatac aacacaagct catttcttgc     480
tcacgttaca tgtcctatgt agatcaacag caggtgactc agggacccag gctccatctc     540
catatgagct tccatagtca ccaggacacg ggctctgaaa gtgtcctcca tgcagggaca     600
catgcctctt cctttcattg ggcagagcaa gtcacttatg ccagaagtc acactgcagg      660
gcagtgccat cctgctgtat gcctgaggag gcatcacccg a                         701
```

<210> 174
<211> 700
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(700)
<223> n = A,T,C or G

55

<400> 174

```
tcgggtgatg cctcctcang cccctaaatc agagtccagg gtcagagcca caggagacag    60
ggaaagacat agattttaac cggcccccct caggagattc tgaggctcag ttcactttgt   120
tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact   180
gcctggatct gcctcccagc tctgccagga accagctgcg tggccttgag ctgctgacac   240
gcagaaagcc ccctgtggac ccagtctcct cgtctgtaag atgaggacag gactctagga   300
acccttttccc ttggtttggc ctcactttca caggctccca tcttgaactc tatctactct   360
tttcctgaaa ccttgtaaaa gaaaaaagtg ctagcctggg caacatggca aaaccctgtc   420
tctacaaaaa atacaaaaat tagttgggtg tggtggcatg tgcctgtagt cccagccact   480
tgggaggtgc tgaggtggga ggatcacttg agcccgggag gtggaggttg cagtgagcca   540
agatcatgcc actgcactcc agcctgagta atagagtaag actctgtctc aaaaacaaca   600
acaacaacag tgagtgtgcc tctgtttccg ggttggatgg ggcaccacat ttatgcatct   660
ctcagatttg gacgctgcag cctgaggagg catcacccga                          700
```

```
<210> 175
<211> 484
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = A,T,C or G
```

<400> 175

```
tataggcga attgggcccg agttgcatgn tcccggccgc catggccgcg ggattcgggt     60
gatgcctcct caggcttgtc tgccacaagc tacttctctg agctcagaaa gtgccccttg   120
atgagggaaa atgtcctact gcactgcgaa tttctcagtt ccattttacc tcccagtcct   180
ccttctaaac cagttaataa attcattcca caagtattta ctgattacct gcttgtgcca   240
gggactattc tcaggctgaa gaaggtggga ggggagggcg gaacctgagg agccacctga   300
gccagcttta tatttcaacc atggctggcc catctgagag catctcccca ctctcgccaa   360
cctatcgggg catagcccag ggatgccccc aggcggccca ggttagatgc gtccctttgg   420
cttgtcagtg atgacataca ccttagctgc ttagctggtg ctggcctgag gaggcatcac   480
ccga                                                               484
```

```
<210> 176
<211> 432
<212> DNA
<213> Homo sapien
```

<400> 176

```
tcgggtgatg cctcctcagg gctcaaggga tgagaagtga cttctttctg gagggaccgt     60
tcatgccacc caggatgaaa atggataggg acccacttgg aggacttgct gatatgtttg   120
gacaaatgcc aggtagcgga attggtactg gtccaggagt tatccaggat agattttcac   180
ccaccatggg acgtcatcgt tcaaatcaac tcttcaatgg ccatggggga cacatcatgc   240
ctcccacaca atcgcagttt ggagagatgg gaggcaagtt tatgaaaagc cagggctaa    300
gccagctcta ccataaccag agtcagggac tcttatccca gctgcaagga cagtcgaagg   360
atatgccacc tcggttttct aagaaaggac agcttaatgc agatgagatt agcctgagga   420
ggcatcaccc ga                                                      432
```

```
<210> 177
<211> 788
<212> DNA
<213> Homo sapien

<400> 177
tagcatgttg agcccagaca cagtagcatt tgtgccaatt tctggttgga atggtgacaa      60
catgctggag ccaagtgcta acatgccttg gttcaaggga tggaaagtca cccgtaagga     120
tggcaatgcc agtggaacca cgctgcttga ggctctggac tgcatcctac caccaactcg     180
cccaactgac aagcccttgc gcctgcctct ccaggatgtc tacaaaattg gtggtattgg     240
tactgttcct gttggccgag tggagactgg tgttctcaaa cccggtatgg tggtcacctt     300
tgctccagtc aacgttacaa cggaagtaaa atctgtcgaa atgcaccatg aagctttgag     360
tgaagctctt cctggggaca atgtgggctt caatgtcaag aatgtgtctg tcaaggatgt     420
tcgtcgtggc aacgttgctg gtgacagcaa aaatgaccca ccaatggaag cagctggctt     480
cactgctcag gtgattatcc tgaaccatcc aggccaaata agtgccggct atgcccctgt     540
attggattgc cacacggctc acattgcatg caagtttgct gagctgaagg aaaagattga     600
tcgccgttct ggtaaaaagc tggaagatgg ccctaaattc ttgaagtctg gtgatgctgc     660
cattgttgat atggttcctg gcaagcccat gtgtgttgag agcttctcag actatccacc     720
tttgggtcgc tttgctgttc gtgatatgag acagacagtt gcggtgggtg tctgggctca     780
acatgcta                                                              788

<210> 178
<211> 786
<212> DNA
<213> Homo sapien

<400> 178
tagcatgttg agcccagaca cctgtgtttc tgggagctct ggcagtggcg gattcatagg      60
cacttgggct gcactttgaa tgacacactt ggctttatta gattcactag tttttaaaaa     120
attgttgttc gtttcttttc attaaaggtt taatcagaca gatcagacag cataattttg     180
tatttaatga cagaaacgtt ggtacatttc ttcatgaatg agcttgcatt ctgaagcaag     240
agcctacaaa aggcacttgt tataaatgaa agttctggct ctagaggcca gtactctgga     300
gtttcagagc agccagtgat tgttccagtc agtgatgcct agttatatag aggaggagta     360
cactgtgcac tcttctaggt gtaagggtat gcaactttgg atcttaaaat tctgtacaca     420
tacacacttt atatatatgt atgtatgtat gaaaacatga aattagtttg tcaaatatgt     480
gtgtgtttag tattttagct tagtgcaact atttccacat tatttattaa attgatctaa     540
gacactttct tgttgacacc ttgaatatta atgttcaagg gtgcaatgtg tattccttta     600
gattgttaaa gcttaattac tatgatttgt agtaaattaa cttttaaaat gtatttgagc     660
ccttctgtag tgtcgtaggg ctcttacagg gtgggaaaga ttttaatttt ccagttgcta     720
attgaacagt atggcctcat tatatatttt gatttatagg agtttgtgtc tgggctcaac     780
atgcta                                                                786

<210> 179
<211> 796
<212> DNA
<213> Homo sapien

<400> 179
tagcatgttg agcccagaca ctggttacaa gaccagacct gcttcctcca tatgtaaaca      60
gcttttaaaa agccagtgaa ccttttttaat actttggcaa ccttctttca caggcaaaga     120
acacccccat ccgccccttg tttggagtgc agagtttggc tttggttctt tgccttgcct     180
```

```
ggagtatact tctaattcct gttgtcctgc acaagctgaa taccgagcta cccaccgcca    240
cccaggccag gtttccactc atttattact ttatgtttct gttccattgc tggtccacag    300
aaataagttt tcctttggag gaatgtgatt ataccccttt aatttcctcc ttttgctttt    360
ttttaatatc attggtatgt gtttggccca gaggaaactg aaattcacca tcatcttgac    420
tggcaatccc attaccatgc tttttttaaa aaacgtaatt tttcttgcct tacattggca    480
gagtagccct tcctggctac tggcttaatg tagtcactca gtttctaggt ggcattaggc    540
atgagacctg aagcacagac tgtcttacca caaaaggtga caagatctca aaccttagcc    600
aaagggctat gtcaggtttc aatgctatct gcttctgttc ctgctcactg ttctggattt    660
tgtccttctt catccctagc accagaattt cccagtctcc ctccctacct tcccttgttt    720
taattctaat ctatcagcaa ataacttttt caaatgtttt aaccggtatc tccatgtgtc    780
tgggctcaac atgcta                                                    796
```

```
        <210> 180
        <211> 488
        <212> DNA
        <213> Homo sapien


        <400> 180
ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt     60
aaaacgacgg ccagtgaatt gtaatacgac tcactatagg gcgaattggg cccgacgtcg    120
catgctcccg gccgccatgg ccgcgggata gcatgttgag cccagacacc tgcaggtcat    180
ttggagagat ttttcacgtt accagcttga tggtcttttt caggaggaga gacactgagc    240
actcccaagg tgaggttgaa gatttcctct agatagccgg ataagaagac taggagggat    300
gcctagaaaa tgattagcat gcaaattct acctgccatt tcagaactgt gtgtcagccc      360
acattcagct gcttcttgtg aactgaaaag agagaggtat tgagactttt ctgatggccg    420
ctctaacatt gtaacacagt aatctgtgtg tgtgtgggtg tgtgtgtgtg tctgggctca    480
acatgcta                                                            488
```

```
        <210> 181
        <211> 317
        <212> DNA
        <213> Homo sapien


        <400> 181
tagcatgttg agcccagaca cggcgacggt acctgatgag tggggtgatg gcacctgtga     60
aaaggaggaa cgtcatcccc catgatattg gggacccaga tgatgaacca tggctccgcg    120
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc    180
tgcaggttta tcgggactat tacctcacgg gtgatcaaaa cttcctgaag gacatgtggc    240
ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccaggggta tggttggtgt    300
ctgggctcaa catgcta                                                  317
```

```
        <210> 182
        <211> 507
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(507)
        <223> n = A,T,C or G
```

<400> 182

```
tagcatgttg agcccagaca ctggctgtta gccaaatcct ctctcagctg ctccctgtgg    60
tttggtgact caggattaca gaggcatcct gtttcaggga acaaaaagat tttagctgcc   120
agcagagagc accacataca ttagaatggt aaggactgcc acctccttca agaacaggag   180
tgagggtggt ggtgaatggg aatggaagcc tgcattccct gatgcatttg tgctctctca   240
aatcctgtct tagtcttagg aaaggaagta aagtttcaag gacggttccg aactgctttt   300
tgtgtctggg ctcaacatgc tatcccgcgg ccatggcggc cgggagcatg cgacgtcggg   360
cccaattcgc cctatagtga gtcgtattac aattcactgg ccgtcgtttt acaacgtcgt   420
gactgggaaa accctggcgt tacccaactt aatcgccttg cagcacatcc ccctttccca   480
gctggcgtaa tancgaaaag gcccgca                                       507
```

<210> 183
<211> 227
<212> DNA
<213> Homo sapien

<400> 183

```
gatttacgct gcaacactgt ggaggtagcc ctggagcaag gcaggcatgg atgcttctgc    60
aatccccaaa tggagcctgg tatttcagcc aggaatctga gcagagcccc ctctaattgt   120
agcaatgata agttattctc tttgttcttc aaccttccaa tagccttgag cttccagggg   180
agtgtcgtta atcattacag cctggtctcc acagtgttgc agcgtaa                 227
```

<210> 184
<211> 225
<212> DNA
<213> Homo sapien

<400> 184

```
ttacgctgca acactgtgga gcagattaac atcagacttt tctatcaaca tgactggggt    60
tactaaaaag acaacaaatc aatggcttca aaagtctaag gaataatttc gatacttcaa   120
ctttataaaa cctgacaaaa ctatcaatca agcataaaga cagatgaaga acatttccag   180
attttggcca atcagatatt ttacctccac agtgttgcag cgtaa                   225
```

<210> 185
<211> 597
<212> DNA
<213> Homo sapien

<400> 185

```
ggcccgacgt cgcatgctcc cggccgccat ggccgcggga ttcgttaggg tctctatcca    60
ctgggaccca taggctagtc agagtattta gagttgagtt cctttctgct tcccagaatt   120
tgaaagaaaa ggagtgaggt gatagagctg agagatcaga tttgcctctg aagcctgttc   180
aagatgtatg tgctcagacc ccaccactgg ggcctgtggg tgaggtcctg ggcatctatt   240
tgaatgaatt gctgaagggg agcactatgc caaggaaggg gaacccatcc tggcactggc   300
acaggggtca ccttatccag tgctcagtgc ttctttgctg ctacctggtt ttctctcata   360
tgtgaggggc aggtaagaag aagtgcccrg tgttgtgcga gttttagaac atctaccagt   420
aagtggggaa gtttcacaaa gcagcagctt tgttttgtgt attttcacct tcagttagaa   480
gaggaaggct gtgagatgaa tgttagttga gtggaaaaga cgggtaagct tagtggatag   540
agaccctaac gaatcactag tgcggccgcc ttgcaggtcg accatatggg agagctc      597
```

<210> 186

<211> 597
<212> DNA
<213> Homo sapien

<400> 186
```
ggcccgaagt tgcatgttcc cggccgccat ggccgcggga ttcgttaggg tctctatcca     60
ctacctaaaa aatcccaaac atataactga actcctcaca cccaattgga ccaatccatc    120
accccagagg cctacagatc ctcctttgat acataagaaa atttccccaa actacctaac    180
tatatcattt tgcaagattt gttttaccaa attttgatgg cctttctgag cttgtcagtg    240
tgaaccacta ttacgaacga tcggatatta actgcccctc accgtccagg tgtagctggc    300
aacatcaagt gcagtaaata ttcattaagt tttcacctac taaggtgctt aaacaccta     360
gggtgccatg tcggtagcag atcttttgat ttgtttttat ttcccataag ggtcctgttc    420
aaggtcaatc atacatgtag tgtgagcagc tagtcactat cgcatgactt ggagggtgat    480
aatagaggcc tcctttgctg ttaaagaact cttgtcccag cctgtcaaag tggatagaga    540
ccctaacgaa tcactagtgc ggccgcctgc aggtcgacca tatgggagag ctcccaa        597
```

<210> 187
<211> 324
<212> DNA
<213> Homo sapien

<400> 187
```
tcgttagggt ctctatccac ttgcaggtaa aatccaatcc tgtgtatatc ttatagtctt     60
ccatatgtag tggttcaaga gactgcagtt ccagaaagac tagccgagcc catccatgtc    120
ttccacttaa ccctgctttg ggttacacat cttaactttt ctgttcaagt ttctctgtgt    180
agtttatagc atgagtattg ggawaatgcc ctgaaacctg acatgagatc tgggaaacac    240
aaacttactc aataagaatt tctcccatat ttttatgatg gaaaaatttc acatgcacag    300
aggagtggat agagaccta acga                                             324
```

<210> 188
<211> 178
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 188
```
gcgcggggat tcggggtgat acctcctcat gccaaaatac aacgtntaat ttcacaactt     60
gccttccaat ttacgcattt tcaatttgct ctccccattt gttgagtcac aacaaacacc    120
attgcccaga aacatgtatt acctaacatg cacatactct taaaactact catccctt      178
```

<210> 189
<211> 367
<212> DNA
<213> Homo sapien

<400> 189
```
tgacaccttg tccagcatct gacacagtct tggctcttgg aaaatattgg ataaatgaaa     60
```

```
atgaatttct ttagcaagtg gtataagctg agaatatacg tatcacatat cctcattcta    120
agacacattc agtgtccctg aaattagaat aggacttaca ataagtgtgt tcactttctc    180
aatagctgtt attcaattga tggtaggcct taaaagtcaa agaaatgaga gggcatgtga    240
aaaaaagctc aacatcactg atcattagaa aacttccatt caaacccca atgagatacc     300
atctcatacc agtcagaatg gctattatta aaaagtcaaa aaataacaga tgctggacaa    360
ggtgtca                                                              367
```

```
        <210> 190
        <211> 369
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(369)
        <223> n = A,T,C or G


        <400> 190
gacaccttgt ccagcatctg acaacgctaa cagcctgagg agatctttat ttatttattt    60
agttttttact ctggctaggc agatggtggc taaaacattc atttacccat ttattcattt   120
aattgttcct gcaaggccta tggatagagt attgtccagc actgctctgg aagctaggag    180
catggggatg aacaagatag gctacatcct gttcccacag aacttccact ttagtctggg    240
aaacagatga tatatacaaa tatataaatg aattcaggta gttttaagta cgaaaagaat    300
aagaaagcag agtcatgatt tanaatgctg gaaacagggg ctattgcttg agatattgaa    360
ggtgcccaa                                                            369
```

```
        <210> 191
        <211> 369
        <212> DNA
        <213> Homo sapien


        <400> 191
tgacaccttg tccagcatct gcacagggaa aagaaactat tatcagagtg aacaggcaac    60
ctacagaatg ggagaaaatt tttgcaatct atccatctga caaagggcta atatccagaa    120
tctacaaaga acttatacaa atttacaaga aacaaacaaa caaacaactc ctcaaaaagt    180
gggtgaagga tgtgaacaga cacttctcaa aagaagacat ttatggggcc aacaaacata    240
tgaaaaaaag ctcatcatca ctggtcacta gataaatgca aatcaaaacc acaatgagat    300
accatctcat tccagttaga atggcaatca ttaaaaagtc aggaaacaac agatgctgga    360
caaggtgtc                                                            369
```

```
        <210> 192
        <211> 449
        <212> DNA
        <213> Homo sapien


        <400> 192
tgacgcttgg ccacttgaca cttcatcttt gcacagaaaa acttctttac agatttaatt    60
caagactggt ctagtgacag tcctccagac attttttcat ttgttccata tacgtggaat    120
tttaaaatca tgtttcatca gtttgaaatg atttgggctg ctaatcaaca caattggatc    180
gactgttcta ctaaacaaca ggaaatgtg tatctggcag cctgtggaga aacactaaac     240
attgattttt ctttgccttt tacggacttt gttccagcta catgtaatac caagttctct    300
```

```
ttaagaggag aagatgttga tcttcatttg tttctaccag actgccaccc tagtaaatat    360
tctttattta tgctggtaaa aaattgccat ccaaataaga tgattcatga tactggtatt    420
cctgctgagt gtcaagtggc caagcgtca                                      449
```

```
        <210> 193
        <211> 372
        <212> DNA
        <213> Homo sapien

        <400> 193
tgacgcttgg ccacttgaca ccagggatgt akcagttgaa tataatcctg caattgtaca     60
tattggcaat ttcccatcaa acattctaga aagagacaac caggattgct aggccataaa    120
agctgcaata aataactggt aattgcagta atcatttcag gccaattcaa tccagtttgg    180
ctcagaggtg cctttggctg agagaagagg tgagatataa tgtgttttct tgcaacttct    240
tgqaagaata actccacaat agtctgagga ctagatacaa acctatttgc cattaaagca    300
ccagagtctg ttaattccag tactgataag tgttggagat tagactccag tgtgtcaagt    360
ggccaagcgt ca                                                        372
```

```
        <210> 194
        <211> 309
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(309)
        <223> n = A,T,C or G

        <400> 194
tgacgcttgg ccacttgaca cttatgtaga atccatcgtg ggctgatgca agccctttat     60
ttaggcttag tgttgtgggc accttcaata tcacactaga gacaaacgcc acaagatctg    120
cagaaacatt cagttctgan cactcgaatg gcaggataac tttttgtgtt gtaatccttc    180
acatatacaa aaacaaactc tgcantctca cgttacaaaa aaacgtactg ctgtaaaata    240
ttaagaaggg gtaaaggata ccatctataa caaagtaact tacaactagt gtcaagtggc    300
caagcgtca                                                            309
```

```
        <210> 195
        <211> 312
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(312)
        <223> n = A,T,C or G

        <400> 195
tgacgcttgg ccacttgaca cccaatctcg cacttcatcc tcccagcacc tgatgaagta     60
ggactgcaac tatccccact tcccagatga ggggaccaan gtacacatta ggacccggat    120
gggagcacag atttgtccga tcccagactc caagcactca gcgtcactcc aggacagcgg    180
ctttcagata aggtcacaaa catgaatggc tccgacaacc ggagtcagtc cgtgctgagt    240
```

```
taaggcaatg gtgacacgga tgcacgtgtn acctgtaatg gttcatcgta agtgtcaagt        300
ggccaagcgt ca                                                             312
```

```
        <210> 196
        <211> 288
        <212> DNA
        <213> Homo sapien


        <400> 196
tgtatcgacg tagtggtctc ctcagccatg cagaactgtg actcaattaa acctctttcc         60
tttatgaatt acccaatctc gggtagtgtc tttatagtag tgtgagaatg gactaataca        120
agtacatttt acttagtaat aataataaac aaatatatta catttttgtg tatttactac        180
accatatttt ttattgttat tgtagtgtac accttctact tattaaaaga aataggcccg        240
aggcgggcag atcacgaggt caggagatgg agaccactac gtcgatac                     288
```

```
        <210> 197
        <211> 289
        <212> DNA
        <213> Homo sapien


        <400> 197
ttgggcacct tcaatatcat gacaggtgat gtgataacca agaaggctac taagtgatta         60
atgggtgggt aatgtataca gagtaggtac actggacaga ggggtaattc atagccaagg        120
caggagaagc agaatggcaa aacatttcat cacactactc aggatagcat gcagtttaaa        180
acctataagt agtttatttt tggaattttc cacttaatat tttcagactg caggtaacta        240
aactgtggaa cacaagaaca tagataaggg gagaccacta cgtcgatac                     289
```

```
        <210> 198
        <211> 288
        <212> DNA
        <213> Homo sapien


        <400> 198
gtatcgacgt agtggtctcc caagcagtgg gaagaaaacg tgaaccaatt aaaatgtatc         60
agatacccca aagaaaggcg cttgagtaaa gattccaagt gggtcacaat ctcagatctt        120
aaaattcagg ctgtcaaaga gatttgctat gaggttgctc tcaatgactt caggcacagt        180
cggcaggaga ttgaagccct ggccattgtc aagatgaagg agctttgtgc catgtatggc        240
aagaaagacc ccaatgagcg ggactcctgg agaccactac gtcgatac                     288
```

```
        <210> 199
        <211> 1027
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(1027)
        <223> n = A,T,C or G


        <400> 199
gctttttggg aaaaacncaa ntgggggaaa gggggnttnn tngcaagggg ataaaggggg         60
```

```
aancccaggg tttccccatt cagggaggtg taaaaagncg gccaggggat tgtaanagga   120
ttcaataata gggggaatgg gcccngaagt tgcaaggttc cngcccgcca tgnccgcggg   180
atttagtgac attacgacgs tggtaataaa gtgggsccaa waaatatttg tgatgtgatt   240
tttsgaccag tgaacccatt gwacaggacc tcatttccty tgagatgrta gccataatca   300
gataaaagrt tagaagtytt tctgcacgtt aacagcatca ttaaatggag tggcatcacc   360
aatttcaccc tttgttagcc gataccttcc ccttgaaggc attcaattaa gtgaccaatc   420
gtcatacgag aggggatggc atggggattg atgatgatat caggggtgat accttcacag   480
gtgaaaggca tatcctcttg tctatactga ataccacaag tacccttttg accatgtcga   540
ctagcaaatt tgtctccaat ctgtgtwatc cctaacagag cgtacccтta ttttacaaaa   600
tttatatcct tcctgattga gagttaccat aacctgatcc acaatgcccg tctcgctwgt   660
tctgagaaaa gtgctacagt ctctcttggt atagcgtcta ttggtgctct ccaattcatc   720
ttcattтttc aggcaaggtg aactgttttg cctataataa cmtcatctcc tgatacmcga   780
aacccckgga rctatcaaac catcatcatc cagcgttckt watgtymcta aatccctatt   840
gcggccgcct gcaggtcaac atatnggaaa accccccacc ccttnggagc ntaccttgaa   900
ttttccatat gtcccntaaa ttanctngnc ttancctggc cntaacctnt tccggtttaa   960
attgtttccg cccccnttcc ccnccttnna accggaaacc ttaattttna accnggggtt   1020
cctatcc                                                             1027
```

        <210> 200
        <211> 207
        <212> DNA
        <213> Homo sapien

        <400> 200

```
agtgacatta cgacgctggc catcttgaat cctagggcat gaagttgccc caaagttcag    60
cacttggtta agcctgatcc ctctggtttta tcacaaagaa taggatggga taaagaaagt   120
ggacacttaa ataagctata aattatatgg tccttgtcta gcaggagaca actgcacagg   180
tatactacca gcgtcgtaat gtcacta                                        207
```

        <210> 201
        <211> 209
        <212> DNA
        <213> Homo sapien

        <400> 201

```
tgggcacctt caatatctat taaaagcaca aatactgaag aacacaccaa gactatcaat    60
gaggttacat ctggagtcct cgatatatca ggaaaaaatg aagtgaacat tcacagagtt   120
ttacttcttt gggaactcaa atgctagaaa agaaaagggt gccctctttc tctggcttcc   180
tggtcctatc cagcgtcgta atgtcacta                                      209
```

        <210> 202
        <211> 349
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(349)
        <223> n = A,T,C or G

        <400> 202

```
ntacgctgca acactgtgga gccactggtt tttattcccg gcaggttatc cagcaaacag        60
tcactgaaca caccgaagac cgtggtatgg taaccgttca cagtaatcgt tccagtcgtc       120
tgcgggaccc cgacgagcgt cactgggtac agaccagatt cagccggaag agaaagcgcc       180
gcagggagag actcgaactc cactccgctg gtgagcagcc ccatgttttc aactcgaagt       240
tcaaacggca ttgggttata taccatcagc tgaacttcac acacatctcc ttgaacccac       300
tggaaatcta ttttcttgtt ccgctcttct ccacagtgtt gcagcgtaa                   349
```

```
        <210> 203
        <211> 241
        <212> DNA
        <213> Homo sapien

        <400> 203
tgctcctctt gccttaccaa cccaaagccc actgtgaaat atgaagtgaa tgacaaaatt        60
cagttttcaa cgcaatatag tatagtttat ctgattcttt tgatctccag gacactttaa       120
acaactgcta ccaccaccac caacctaggg atttaggatt ctccacagac cagaaattat       180
ttctcctttg agtttcaggc tcctctggga ctcctgttca tcaatgggtg gtaaatggct       240
a                                                                        241
```

```
        <210> 204
        <211> 248
        <212> DNA
        <213> Homo sapien

        <400> 204
tagccattta ccacccatct gcaaaccswg acmwwcargr cywgwackya ggcgatttga        60
agtactggta atgctctgat catgttagtt acataagtgt ggtcagttta caaaaattca       120
cagaactaaa tactcaatgc tatgtgttca tgtctgtgtt tatgtgtgtg taatgtttca       180
attaagtttt tttaaaaaaa agagatgatt tccaaataag aaagccgtgt tggtaaggca       240
agaggagc                                                                 248
```

```
        <210> 205
        <211> 505
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(505)
        <223> n = A,T,C or G

        <400> 205
tacgctgcaa cactgtggag ccattcatac aggtccctaa ttaaggaaca agtgattatg        60
ctacctttgc acggttaggg taccgcggcc gttaaacatg tgtcactggg caggcggtgc       120
ctctaatact ggtgatgcta gaggtgatgt ttttggtaaa caggcggggt aagatttgcc       180
gagttccttt tacttttttt aacctttcct tatgagcatg cctgtgttgg gttgacagtg       240
ggggtaataa tgacttgttg gttgattgta gatattgggc tgttaattgt cagttcagtg       300
ttttaatctg acgcaggctt atgcggagga gaatgttttc atgttactta tactaacatt       360
agttcttcta tagggtgata gattggtcca attgggtgtg aggagttcag ttatatgttt       420
gggatttttt aggtagtggg tgttganctt gaacgctttc ttaattggtg gctgctttta       480
rgcctactat gggtggtaaa tggct                                             505
```

<210> 206
<211> 179
<212> DNA
<213> Homo sapien

<400> 206
tagactgact catgtcccct accaaagccc atgtaaggag ctgagttctt aaagactgaa   60
gacagactat tctctggaga aaaataaaat ggaaattgta ctttaaaaaa aaaaaaaatc   120
ggccgggcat ggtagcacac acctgtaatc ccagctacta ggggacatga gtcagtcta   179

<210> 207
<211> 176
<212> DNA
<213> Homo sapien

<400> 207
agactgactc atgtcccta ccccaccttc tgctgtgctg ccgtgttcct aacaggtcac   60
agactggtac tggtcagtgg cctggggggtt ggggacctct attatatggg atacaaattt   120
aggagttgga attgacacga tttagtgact gatgggatat gggtggtaaa tggcta   176

<210> 208
<211> 196
<212> DNA
<213> Homo sapien

<400> 208
agactgactc atgtcccta tttaacaggg tctctagtgc tgtgaaaaaa aaaaatgctg   60
aacattgcat ataacttata ttgtaagaaa tactgtacaa tgactttatt gcatctgggt   120
agctgtaagg catgaaggat gccaagaagt ttaaggaata tgggtggtaa atggctaggg   180
gacatgagtc agtcta   196

<210> 209
<211> 345
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 209
gacgcttggc cacttgacac cttttatttt ttaaggattc ttaagtcatt tangtnactt   60
tgtaagtttt tcctgtgccc ccataagaat gatagcttta aaaattatgc tggggtagca   120
aagaagatac ttctagcttt agaatgtgta ggtatagcca ggattcttgt gaggaggggt   180
gatttagagc aaatttctta ttctccttgc ctcatctgta acatggggat aataatagaa   240
ctggcttgac aaggttggaa ttagtattac atggtaaata catgtaaaat gtttagaatg   300
gtgccaagta tctaggaagt acttgggcat gggtggtaaa tggct   345

<210> 210

```
<211> 178
<212> DNA
<213> Homo sapien

<400> 210
gacgcttggc cacttgacac tagagtaggg tttggccaac tttttctata aaggaccaga    60
gagtaaatat ttcaggcttt gtgggttgtg cagtctctct tgcaactact cagctctgcc   120
attgtagcat agaaatcagc catagacagg acagaaatga atgggtggta aatggcta      178


<210> 211
<211> 454
<212> DNA
<213> Homo sapien

<400> 211
tgggcacctt caatatctat ccagcgcatc taaattcgct tttttcttga ttaaaaattt    60
caccacttgc tgtttttgct catgtatacc aagtagcagt ggtgtgaggc catgcttgtt   120
ttttgattcg atatcagcac cgtataagag cagtgctttg gccattaatt tatcttcatt   180
gtagacagca tagtgtagag tggtatctcc atactcatct ggaatatttg gatcagtgcc   240
atgttccagc aacattaacg cacattcatc ttcctggcat tgtacggcct ttgtcagagc   300
tgtcctcttt ttgttgtcaa ggacattaag ttgacatcgt ctgtccagca cgagttttac   360
tacttctgaa ttcccattgg cagaggccag atgtagagca gtcctctttt gcttgtccct   420
cttgttcaca tcagtgtccc tgagcataac ggaa                                454


<210> 212
<211> 337
<212> DNA
<213> Homo sapien

<400> 212
tccgttatgc cacccagaaa acctactgga gttacttatt aacatcaagg ctggaaccta    60
tttgcctcag tcctatctga ttcatgagca catggttatt actgatcgca ttgaaaacat   120
tgatcacctg ggtttcttta tttatcgact gtgtcatgac aaggaaactt acaaactgca   180
acgcagagaa actattaaag gtattcagaa acgtgaagcc agcaattgtt tcgcaattcg   240
gcattttgaa aacaaatttg ccgtggaaac tttaatttgt tcttgaacag tcaagaaaaa   300
cattattgag gaaaattaat atcacagcat aacggaa                             337


<210> 213
<211> 715
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(715)
<223> n = A,T,C or G

<400> 213
tcgggtgatg cctcctcagg catcttccat ccatctcttc aagattagct gtcccaaatg    60
ttttttccttc tcttctttac tgataaattt ggactccttc ttgacactga tgacagcttt   120
agtatccttc ttgtcacctt gcagacttta aacataaaaa tactcattgg ttttaaaagg   180
```

```
aaaaaagtat acattagcac tattaagctt ggccttgaaa cattttctat cttttattaa    240
atgtcggtta gctgaacaga attcatttta caatgcagag tgagaaaaga agggagctat    300
atgcatttga gaatgcaagc attgtcaaat aaacatttta aatgctttct taaagtgagc    360
acatacagaa atacattaag atattagaaa gtgttttgc ttgtgtacta ctaattaggg     420
aagcaccttg tatagttcct cttctaaaat tgaagtagat tttaaaaacc catgtaattt    480
aattgagctc tcagttcaga ttttaggaga attttaacag ggatttggtt ttgtctaaat    540
tttgtcaatt tntttagtta atctgtataa ttttataaat gtcaaactgt atttagtccg    600
ttttcatgct gctatgaaag aaataacccan gacagggtta tttataaang gaaagangtt    660
aatttgactc ccagttcaca ggcctgagga ngnatcnccc gaaatcctta ttgcg         715
```

        <210> 214
        <211> 345
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(345)
        <223> n = A,T,C or G

        <400> 214
```
ggtaangngc atacntcggt gctccggccg ccggagtcgg gggattcggg tgatgcctcc     60
tcaggcccac ttgggcctgc ttttcccaaa tggcagctcc tctggacatg ccattccttc    120
tcccacctgc ctgattcttc atatgttggg tgtccctgtt tttctggtgc tatttcctga    180
ctgctgttca gctgccactg tcctgcaaag cctgcctttt taaatgcctc accattcctt    240
catttgtttc ttaaatatgg gaagtgaaag tgccacctga ggccgggcac agtggctcac    300
gcctgtaatc ccagcacttt gggagcctga ggaggcatca cccga                    345
```

        <210> 215
        <211> 429
        <212> DNA
        <213> Homo sapien

        <400> 215
```
ggtgatgcct cctcaggcga agctcaggga ggacagaaac ctcccgtgga gcagaagggc     60
aaaagctcgc ttgatcttga ttttcagtac gaatacagac cgtgaaagcg gggcctcacg    120
atccttctga ccttttgggt tttaagcagg aggtgtcaga aaagttacca cagggataac    180
tggcttgtgg cggccaagcg ttcatagcga cgtcgctttt tgatccttcg atgtcggctc    240
ttcctatcat tgtgaagcag aattcaccaa gcgttggatt gttcacccac taatagggaa    300
cgtgagctgg gtttagaccg tcgtgagaca ggttagtttt accctactga tgatgtgtkg    360
ttgccatggt aatcctgctc agtacgagag gaaccgcagg ttcasacatt tggtgtatgt    420
gcttgcctt                                                           429
```

        <210> 216
        <211> 593
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(593)

<223> n = A,T,C or G

<400> 216

```
tgacacctat gtccngcatc tgttcacagt ttccacaaat agccagcctt tggccacctc        60
tctgtcctga ggtatacaag tatatcagga ggtgtatacc ttctcttctc ttccccacca       120
aagagaacat gcaggctctg gaagctgtct taggagcctt tgggctcaga atttcagagt       180
cttgggtacc ttggatgtgg tctggaagga gaaacattgg ctctggataa ggagtacagc       240
cggaggaggg tcacagagcc ctcagctcaa gcccctgtgc cttagtctaa aagcagcttt       300
ggatgaggaa gcaggttaag taacatacgt aagcgtacac aggtagaaag tgctgggagt       360
cagaattgca cagtgtgtag gagtagtacc tcaatcaatg agggcaaatc aactgaaaga       420
agaagaccna ttaatgaatt gcttangggg aaggatcaag gctatcatgg agatctttct       480
aggaagatta ttgtttanaa ttatgaaagg antagggcag ggacagggcc agaagtanaa       540
ganaacattg cctatanccc ttgtcttgca cccagatgct ggacaaggtg tca             593
```

<210> 217
<211> 335
<212> DNA
<213> Homo sapien

<400> 217

```
tgacaccttg tccagcatct gacgtgaaga tgagcagctc agaggaggtg tcctggattt        60
cctggttctg tgggctccgt ggcaatgaat tcttctgtga agtggatgaa gactacatcc       120
aggacaaatt taatcttact ggactcaatg agcaggtccc tcactatcga caagctctag       180
acatgatctt ggacctggag cctgatgaag aactggaaga caaccccaac cagagtgacc       240
tgattgagca ggcagccgag atgctttatg gattgatcca cgcccgctac atccttacca       300
accgtggcat cgcccagatg ctggacaagg tgtca                                  335
```

<210> 218
<211> 248
<212> DNA
<213> Homo sapien

<400> 218

```
tacgtactgg tcttgaaggt cttaggtaga gaaaaaatgt gaatatttaa tcaaagacta        60
tgtatgaaat gggactgtaa gtacagaggg aagggtggcc cttatcgcca gaagttggta       120
gatgcgtccc cgtcatgaaa tgttgtgtca ctgcccgaca tttgccgaat tactgaaatt       180
ccgtagaatt agtgcaaatt ctaacgttgt tcatctaaga ttatggttcc atgtttctag       240
tactttta                                                                248
```

<210> 219
<211> 530
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(530)
<223> n = A,T,C or G

<400> 219

```
tgacgcttgg ccacttgaca caagtagggg ataaggacaa agacccatna ggtggcctgt        60
```

```
cagccttttg ttactgttgc ttccctgtca ccacggcccc ctctgtaggg gtgtgctgtg   120
ctctgtggac attggtgcat tttcacacat accattctct ttctgcttca cagcagtcct   180
gaggcgggag cacacaggac taccttgtca gatgangata atgatgtctg gccaactcac   240
cccccaacct tctcactagt tatangaaga gccangccta naaccttcta tcctgncccc   300
ttgccctatg acctcatccc tgttccatgc cctattctga tttctggtga actttggagc   360
agcctggttt ntcctcctca ctccagcctc tctccatacc atggtanggg ggtgctgttc   420
cacncaaang gtcaggtgtg tctggggaat cctnananct gccnggagtt tccnangcat   480
tcttaaaaac cttcttgcct aatcanatng tgtccagtgg ccaaccntcn               530
```

```
<210> 220
<211> 531
<212> DNA
<213> Homo sapien

<400> 220
tgacgcttgg ccacttgaca ctaaatagca tcttctaaag gcctgattca gagttgtgga    60
aaattctccc agtgtcaggg attgtcagga acagggctgc tcctgtgctc actttacctg   120
ctgtgtttct gctggaaaag gagggaagag gaatggctga ttttacctta atgtctccca   180
gtttttcata ttcttcttgg atcctcttct ctgacaactg ttcccttttg gtcttcttct   240
tcttgctcag agagcaggtc tctttaaaac tgagaaggga gaatgagcaa atgattaaag   300
aaaacacact tctgaggccc agagatcaaa tattaggtaa atactaaacc gcttgcctgc   360
tgtggtcact tttctcctct ttcacatgct ctatccctct atcccccacc tattcatatg   420
gcttttatct gccaagttat ccggcctctc atcaaccttc tcccctagcc tactggggga   480
tatccatctg ggtctgtctc tggtgtattg gtgtcaagtg gccaagcgtc a            531
```

```
<210> 221
<211> 530
<212> DNA
<213> Homo sapien

<400> 221
attgacgctt ggccacttga cacccgcctg cctgcaatac tggggcaagg gccttcactg    60
ctttcctgcc accagctgcc actgcacaca gagatcagaa atgctaccaa ccaagactgt   120
tggtcctcag cctctctgag gagaaagagc agaagcctgg aagtcagaag agaagctaga   180
tcggctacgg ccttggcagc cagcttcccc acctgtggca ataaagtcgt gcatggctta   240
acaatggggg cacctcctga gaaacacatt gttaggcaat tcggcgtgtg ttcatcagag   300
catatttaca caaacctcga tagtgcagcc tactatccac tattgctcct acgctgcaaa   360
cctgaacagc atgggactgt actgaatact ggaagcagct ggtgatggta cttatttgtg   420
tatctaaaca cagagaaggt acagtaagaa tatggtatca taaacttaca gggaccgcca   480
tcctatatgc agtctgttgt gaccaaaatg tgtcaagtgg ccaagcgtca               530
```

```
<210> 222
<211> 578
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(578)
<223> n = A,T,C or G
```

<400> 222
```
tgtatcgacg tagtggtctc cgggctacta ggccgttgtg tgctggtagt acctggttca    60
ctgaaaggcg catctccctc cccgcgtcgc cctgaagcag ggggaggact tcgcccagcc   120
aaggcagttg tatgagtttt agctgcggca cttcgagacc tctgagccca cctccttcag   180
gagccttccc cgattaagga agccagggta aggattcctt cctcccccag acaccacgaa   240
caaaccacca cccccccctat tctggcagcc catatacatc agaacgaaac aaaaataaca   300
aataaacnaa aaccaaaaaa aaaagagaag gggaaatgta tatgtctgtc catcctgttg   360
ctttagcctg tcagctccta nagggcaggg accgtgtctt ccgaatggtc tgtgcagcgc   420
cgactgcggg aagtatcgga ggaggaagca gagtcagcag aagttgaacg gtgggcccgg   480
cggctcttgg gggctggtgt tgtacttcga gaccgctttc gcttttgtc ttagatttac    540
gtttgctctt tggagtggga naccactacn tcnataca                           578
```

<210> 223
<211> 578
<212> DNA
<213> Homo sapien

<400> 223
```
tgtatcgacg tagtggtctc ctcttgcaaa ggactggctg gtgaatggtt tccctgaatt    60
atggacttac cctaaacata tcttatcatc attaccagtt gcaaaatatt agaatgtgtt   120
gtcactgttt catttgattc ctagaaggtt agtcttagat atgttacttt aacctgtatg   180
ctgtagtgct ttgaatgcat tttttgtttg catttttgtt tgcccaacct gtcaattata   240
gctgcttagg tctggactgt cctggataaa gctgttaaaa tattcaccag tccagccatc   300
ttacaagcta attaagtcaa ctaaatgctt ccttgttttg ccagacttgt tatgtcaatc   360
ctcaatttct gggttcattt tgggtgccct aaatcttagg gtgtgacttt cttagcatcc   420
tgtaacatcc attcccaagc aagcacaact tcacataata ctttccagaa gttcattgct   480
gaagcctttc cttcacccag cggagcaact tgattttcta caacttccct catcagagcc   540
acaagagtat gggatatgga gaccactacg tcgataca                           578
```

<210> 224
<211> 345
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 224
```
tgtatcgacg tantggtctc ccaaggtgct gggattgcag gcatgagcca ccactcccag    60
gtggatcttt ttctttatac ttacttcatt aggtttctgt tattcaagaa gtgtagtggt   120
aaaagtcttt tcaatctaca tggttaaata atgatagcct gggaaataaa tagaaatttt   180
ttctttcatc tttaggttga ataaagaaac agaaaaaata gaacatactg aaaataatct   240
aagttccaac catagaagaa ctgcagaaga aatgaagaaa gtgatgatga tttagatttt   300
gatattgatt tagaagacac aggaggagac cactacgtcg ataca                   345
```

<210> 225
<211> 347
<212> DNA
<213> Homo sapien

```
        <400> 225
tgtatcgacg tagtggtctc caaactgagg tatgtgtgcc actagcacac aaagccttcc      60
aacagggacg caggcacagg cagtttaaag ggaatctgtt tctaaattaa tttccacctt     120
ctctaagtat tctttcctaa aactgatcaa ggtgtgaagc ctgtgctctt tcccaactcc     180
cctttgacaa cagccttcaa ctaacacaag aaaaggcatg tctgacactc ttcctgagtc     240
tgactctgat acgttgttct gatgtctaaa gagctccaga acaccaaagg gacaattcag     300
aatgctggtg tataacagac tccaatggag accactacgt cgataca                   347


        <210> 226
        <211> 281
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(281)
        <223> n = A,T,C or G

        <400> 226
aggngnggga ntgtatcgac gtagtggtct cccaacagtc tgtcattcag tctgcaggtg      60
tcagtgtttt ggacaatgag gcaccattgt cacttattga ctcctcagct ctaaatgctg     120
aaattaaatc ttgtcatgac aagtctggaa ttcctgatga ggttttacaa agtattttgg     180
atcaatactc caacaaatca gaaagccaga aagaggatcc tttcaatatt gcagaaccac     240
gagtggattt acacacctca ggagaccact acgtcgatac a                         281


        <210> 227
        <211> 3646
        <212> DNA
        <213> Homo sapien

        <400> 227
gggaaacact tcctcccagc cttgtaaggg ttggagccct ctccagtata tgctgcagaa      60
ttttctctc ggtttctcag aggattatgg agtccgcctt aaaaaaggca agctctggac      120
actctgcaaa gtagaatggc caaagtttgg agttgagtgg ccccttgaag ggtcactgaa     180
cctcacaatt gttcaagctg tgtggcgggt tgttactgaa actcccggcc tccctgatca     240
gtttccctac attgatcaat ggctgagttt ggtcaggagc accccttccg tggctccact     300
catgcaccat tcataatttt acctccaagg tcctcctgag ccagaccgtg ttttcgcctc     360
gaccctcagc cggttcggct cgccctgtac tgcctctctc tgaagaagag gagagtctcc     420
ctcacccagt cccaccgcct taaaaccagc ctactccctt agggtcatcc catgtctcct     480
cggctatgtc ccctgtaggc tcatcaccca ttgcctcttg gttgcaaccg tggtgggagg     540
aagtagcccc tctactacca ctgagagagg cacaagtccc tctgggtgat gagtgctcca     600
ccccttcct ggtttatgtc ccttctttct acttctgact tgtataattg gaaaacccat      660
aatcctccct tctctgaaaa gccccaggct ttgacctcac tgatggagtc tgtactctgg     720
acacattggc ccacctggga tgactgtcaa cagctccttt tgaccctttt cacctctgaa     780
gagagggaaa gtatccaaag agaggccaaa aagtacaacc tcacatcaac caataggccg     840
gaggaggaag ctagaggaat agtgattaga cacccaattg ggacctaatt gggacccaaa     900
tttctcaagt ggagggagaa cttttgacga tttccaccgg tatctcctcg tgggtattca     960
gggagctgct cagaaaccta taaacttgtc taaggcgact gaagtcgtcc aggggcatga    1020
tgagtcacca ggagtgtttt tagagcacct ccaggaggct tatcagattt acaccccttt    1080
tgacctggca gcccccgaaa atagccatgc tcttaatttg gcatttgtgg ctcaggcagc    1140
```

```
cccagatagt aaaaggaaac tccaaaaact agagggattt tgctggaatg aataccagtc    1200
agcttttaga gatagcctaa aaggtttttg acagtcaaga ggttgaaaaa caaaaacaag    1260
cagctcaggc agctgaaaaa agccactgat aaagcatcct ggagtatcag agtttactgt    1320
tagatcagcc tcatttgact tcccctccca catggtgttt aaatccagct acactacttc    1380
ctgactcaaa ctccactatt cctgttcatg actgtcagga actgttggaa actactgaaa    1440
ctggccgacc tgatcttcaa aatgtgcccc taggaaaggt ggatgccacc atgttcacag    1500
acagtagcag cttcctcgag aagggactac gaaaggccgg tgcagctgtt accatggaga    1560
cagatgtgtt gtgggctcag gctttaccag caaacacctc agcacaaaag gctgaattga    1620
tcgccctcac tcaggctctc cgatggggta aggatattaa cgttaacact gacagcaggt    1680
acgcctttgc tactgtgcat gtacgtggag ccatctacca ggagcgtggg ctactcacct    1740
cagcaggtgg ctgtaatcca ctgtaaagga catcaaaagg aaaacacggc tgttgcccgt    1800
ggtaaccaga aagctgattc agcagctcaa gatgcagtgt gactttcagt cacgcctcta    1860
aacttgctgc ccacagtctc ctttccacag ccagatctgc ctgacaatcc cgcatactca    1920
acagaagaag aaaactggcc tcagaactca gagccaataa aaatcaggaa ggttggtgga    1980
ttcttcctga ctctagaatc ttcatacccc gaactcttgg gaaaacttta atcagtcacc    2040
tacagtctac cacccattta ggaggagcaa agctacctca gctcctccgg agccgtttta    2100
agatccccca tcttcaaagc ctaacagatc aagcagctct ccggtgcaca acctgcgccc    2160
aggtaaatgc caaaaaaggt cctaaaccca gcccaggcca ccgtctccaa gaaaactcac    2220
caggagaaaa gtgggaaatt gactttacag aagtaaaacc acaccgggct gggtacaaat    2280
accttctagt actggtagac accttctctg gatggactga agcatttgct accaaaaacg    2340
aaactgtcaa tatggtagtt aagtttttac tcaatgaaat catccctcga catgggctgc    2400
ctgtttgcca tagggtctga taatggaccg gccttcgcct tgtctatagt ttagtcagtc    2460
agtaaggcgt taaacattca atggaagctc cattgtgcct atcgacccca gagctctggg    2520
caagtagaac gcatgaactg caccctaaaa aacactctta caaaattaat cttagaaacc    2580
ggtgtaaatt gtgtaagtct ccttccttta gccctactta gagtaaggtg cacccccttac   2640
tgggctgggt tcttaccttt tgaaatcatg tatgggaggg tgctgcctat cttgcctaag    2700
ctaagagatg cccaattggc aaaaatatca caaactaatt tattacagta cctacagtct    2760
ccccaacagg tacaagatat catcctgcca cttgttcgag gaacccatcc caatccaatt    2820
cctgaacaga cagggccctg ccattcattc ccgccaggtg acctgttgtt tgttaaaaag    2880
ttccagagag aaggactccc tcctgcttgg aagagacctc acaccgtcat cacgatgcca    2940
acggctctga aggtggatgg cattcctgcg tggattcatc actcccgcat caaaaaggcc    3000
aacagagccc aactagaaac atgggtcccc agggctgggt caggccccctt aaaactgcac    3060
ctaagttggg tgaagccatt agattaattc ttttttcttaa ttttgtaaaa caatgcatag    3120
cttctgtcaa acttatgtat cttaagactc aatataaccc ccttgttata actgaggaat    3180
caatgatttg attcccccaa aaacacaagt ggggaatgta gtgtccaacc tggtttttac    3240
taaccctgtt tttagactct cccttttcctt taatcactca gcttgtttcc acctgaattg    3300
actctccctt agctaagagc gccagatgga ctccatcttg gctctttcac tggcagccgc    3360
ttcctcaagg acttaacttg tgcaagctga ctcccagcac atccaagaat gcaattaact    3420
gataagatac tgtggcaagc tatatccgca gttcccagga attcgtccaa ttgatcacag    3480
cccctctacc cttcagcaac caccaccctg atcagtcagc agccatcagc accgaggcaa    3540
ggccctccac cagcaaaaag attctgactc actgaagact tggatgatca ttagtatttt    3600
tagcagtaaa gttttttttt cttttct ctttttttct cgtgcc                       3646
```

<223> n = A,T,C or G

<400> 228

```
taagagggta caagatctaa gcacagccgt caatgcagaa cacagaacgt agcctggtaa    60
gtgtgttaag agtgggaatt tttggagtac agagtaaggc acctaaccct agctggggtt   120
tggtgacggt cccagatggc ttacagaaga aagtgtcctg agatgagttt ttaagaatga   180
ataaggatag acacaagtga ggactgactt ggcagtggtg aatggtgggt ggcaaaaaac   240
ttcgcatgta tggaaactgc acgtacagga atgaagaatg agactgtgtg gtgtttaatg   300
agctgcaaat actaatttta tcctgaaagt tttgaagagt taactaaaaa gtattttta   360
gtaaggaaat aaccctacat ttcagggtta ttgtttgttt anatattgaa ggtgcccaa    419
```

<210> 229
<211> 148
<212> DNA
<213> Homo sapien

<400> 229

```
aagagggtac ctgtatgtag ccatggtggc aatgagagac tgattactac ctgctggaga    60
ttgtttaagt gagttaatat attaaggata aagggagcca ggttttttga ctgttggaga   120
aggaaattac agatattgaa ggtcccaa                                       148
```

<210> 230
<211> 257
<212> DNA
<213> Homo sapien

<400> 230

```
taagagggta cmaaaaaaaa aaaatagaac gaatgagtaa gacctactat ttgatagtac    60
aacagggtga ctatagtcaa tgataactta attatacatt taacatagag tgtaattgga   120
ttgtttgtaa ctcgaaggat aaatgcttga gaggatggat acccccattct ccatgatgta  180
cttatttcac attacatgcc tgtatcaaag catctcatat accctataaa tatgtacacc   240
tactatgtac cctctta                                                   257
```

<210> 231
<211> 260
<212> DNA
<213> Homo sapien

<400> 231

```
taagagggta cgggtatttg ctgatgggat ttttttttct ttcttttct ttggaaaaca     60
aaatgaaagc cagaacaaaa ttattgaaca aaagacaggg actaaatctg gagaaatgaa   120
gtcccctcac ctgactgcca tttcattcta tctgaccttc cagtctaggt taggagaata   180
gggggtggag gggattaatc tgatacaggt atatttaaag caactctgca tgtgtgccag   240
aagtccatgg taccctctta                                                260
```

<210> 232
<211> 596
<212> DNA
<213> Homo sapien

<220>

```
<221> misc_feature
<222> (1)...(596)
<223> n = A,T,C or G

<400> 232
tgctcctctt gccttaccaa ccacaaatta gaaccataat gagatgtcac ctcatacctg      60
gtgggattaa cattatttaa aaaatcagaa gtattgacaa ggatgtgaag aaattagaac     120
atctgtgcac tgttggtggg aatgtaaaaa aggtgtggcc actatgggta acagcatgaa     180
ggttcctcaa aaaaaatttt ttttaatcta ctctatgatc gatcttgagg ttgtttatgc     240
aaaagaactg aaatcaggat tttgaggaaa tattcacatt cccacatcca tttctgcttt     300
attcataata ctcaagagat ggaaacaacc taaatgtcca tcccgggatg aatggataaa     360
cacagtgtgg tatatgcata caatggaata ttatttagtc tttaaaaaga aaaattctat     420
catatactac aacttanatn aaccttgagg acacaatgct nagtgaaata agccacggaa     480
ggacgaatac tgcattattc ccttatatga agtatctaaa gtggtcaaac tcttanagca     540
naaagtaaaa atgggtggtt gccanacagt tggttaggcn agaaganaan cctant        596

<210> 233
<211> 96
<212> DNA
<213> Homo sapien

<400> 233
tcttctgaag acctttcgcg actcttaagc tcgtggttgg taaggcaaga ggagcgttgg      60
taaggcaaga ggagcgttgg taaggcaaga ggagca                                96

<210> 234
<211> 313
<212> DNA
<213> Homo sapien

<400> 234
tgtaagtcga gcagtgtgat gataaaactt gaatggatca atagttgctt cttatggatg      60
agcaaagaaa gtagtttctt gtgatggaat ctgctcctgg caaaaatgct gtgaacgttg     120
ttgaaaagac aacaaagagt ttagagtagt acataaattt agaatagtac ataaacttag     180
aatagtacat aaacttagta cataaataat gcacgaagca ggggcagggc ttgagagaat     240
tgacttcaat ttggaaagag tatctactgt aggttagatg ctctcaaaca gcatcacact     300
gctcgactta caa                                                        313

<210> 235
<211> 550
<212> DNA
<213> Homo sapien

<400> 235
aacgaggaca gatccttaaa aagaatgttg agtgaaaaaa gtagaaaata agataatctc      60
caaagtccag tagcattatt taaacatttt taaaaaatac actgataaaa attttgtaca     120
tttcccaaaa atacatatgg aagcacagca gcatgaatgc ctatgggrtt gaggataggg     180
gttgggagta gggatgggga taaaggggga aaataaaacc agagaggagt cttacacatt     240
tcatgaacca aggagtataa ttatttcaac tatttgtacc wgaagtccag aaagagtgga     300
ggcagaaggg ggagaagagg gcgaagaaac gtttttggga gaggggtccc asaagagaga     360
ttttcgcgat gtggcgctac atacgttttt ccaggatgcc ttaagctctg caccctattt     420
```

```
ttctcatcac taatattaga ttaaacccatt tgaagacagc gtctgtggtt tctctacttc    480
agctttccct ccgtgtcttg cacacagtag ctgtttttaca agggttgaac tgactgaagt    540
gagattattc                                                           550


        <210> 236
        <211> 325
        <212> DNA
        <213> Homo sapien


        <400> 236
tagactgact catgtccect accagagtag ctagaattaa tagcacaagc ctctacaccc     60
aggaactcac tattgaatac ataaatggaa tttattcagc cttaaaaagt ttggaaggaa    120
attctgacat atgctaaaac atggatgaac cttgaagact ttatgataag taaaagaagc    180
cagtcataaa aggaaaaata ttgcatgatt ccacttatat gaggtaccta gagtagtcaa    240
tttcatagaa acacaaaata gaatggtgtt tgccagggct tttgaggaaa agggaatgac    300
aagttagggg acatgagtca gtcta                                         325


        <210> 237
        <211> 373
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(373)
        <223> n = A,T,C or G


        <400> 237
tagactgact catgtccect atctactcaa catttccact tgaagtctga taggcatctc     60
agacttatct tgtcccaaag caaactcttt atttctttc atcctagtct ttatttcttg     120
tgctgtctta cccatctcaa aagagtgcca aaatccacca agttgctgaa acagaaatct    180
aagaaatatc cttgattctt cttttttccca tctacttcac ttctaattca ttagtaaata    240
atctgtttca gaaaaccaaa cacctcatgt tctcactcat aaggggggagt tgaacaatga    300
gaacacacag acacagggag gggaacatca cacaccacgg cccgtcaggg agtangggac    360
atgagtcagt cta                                                      373


        <210> 238
        <211> 492
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(492)
        <223> n = A,T,C or G


        <400> 238
tagactgact catgtccect ataatgctcc caggcatcag aaagcatctc aaactggagc     60
tgacaccatg gcagaggttt caggtaagtc acaaaagggg tcctaaagaa tttgccctca    120
atatcagagt gattagaaga agtggacaga gctacccaag ttaaacatat gcgagataaa    180
aaaaatatgg cacttgtgaa cacacactac aggaggaaaa taaggaacat aatagcatat    240
```

```
tgtgctatta tgatgatgaa gaacctctct anaagaaaac ataaccaaag aaacaaagaa    300
aattcctgcn aatgtttaat gctatagaag aaattaacaa aaacatatat tcaatgaatt    360
cagaaaagtt agcaggtcan aagaaaacaa atcaaagacc agaataatcc cattttagat    420
tgtcgagtaa actanaacag aaagaatacc actggaaatt gaattcctac gtangggaca    480
tgantcantc ta                                                        492
```

```
        <210> 239
        <211> 482
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(482)
        <223> n = A,T,C or G

        <400> 239
tggaaagtat ttaatgatgg gcaacttgct gtttacttcc tacatatccc atcatcttct     60
gtattttttt aaataacttt tttttggatt tttaaagtaa ccttattctg agaggtaaca    120
tggattacat acttctaagc cattaggaga ctctatgtta aaccaaaagg aaatgttact    180
agatcttcat ttgatcaata ggatgtgata atcatcatct ttctgctcta atggaaaagt    240
actanaaaca tggaaccata atcttagatg aacaacgtta gaatttgcac taattctacg    300
gaatttcagt aattcggcaa atgtcgggca gtgacacaac atttcatgac ggggacgcat    360
ctaccaactt ctggcgataa gggccaccct tccctctgta cttacagtcc catttcatac    420
acagtctttg attaaatatt cacatttttt ctctacctaa agaccttcaa gaccagtacg    480
ta                                                                   482
```

```
        <210> 240
        <211> 519
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(519)
        <223> n = A,T,C or G

        <400> 240
tgtatcgacg tagtggtctc cccatgtgat agtctgaaat atagcctcat gggatgagag     60
gctgtgcccc agcccgacac ccgtaaaggg tctgtgctga ggtggattag taaaagagga    120
aagccttgca gttgagatag aggaagggca ctgtctcctg cctgcccctg ggaactgaat    180
gtctcggtat aaaacccgat tgtacatttg ttcaattctg agataggaga aaaaccaccc    240
tatggcggga ggcgagacat gttggcagca atgctgcctt gttatgcttt actccacaga    300
tgtttgggcg gagggaaaca taaatctggc ctacgtgcac atccaggcat agtacctccc    360
tttgaactta attatgacac agattccttt gctcacatgt ttttttgctg accttctcct    420
tattatcacc ctgctctcct accgcattcc ttgtgctgag ataatgaaaa taatatcaat    480
aaaaacttga nggaactcgg agaccactac gtcgataca                          519
```

```
        <210> 241
        <211> 771
        <212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 241
```
tgtatcgacg tagtggtctc cactcccgcc ttgacggggc tgctatctgc cttccaggcc    60
actgtcacgg ctcccgggta gaagtcactt atgagacaca ccagtgtggc cttgttggct   120
tgaagctcct cagaggaggg tgggaacaga gtgaccgagg gggcagcctt gggctgacct   180
aggacggtca gcttggtccc tccgccaaac acgagagtgc tgctgcttgt atatgagctg   240
cagtaataat cagcctcgtc ctcagcctgg agcccagaga tggtcaggga ggccgtgttg   300
ccanacttgg agccagagaa gcgattagaa acccctgagg gccgattacc gacctcataa   360
atcatgaatt tgggggcttt gcctgggtgc tgttggtacc angagacatt attataacca   420
ccaacgtcac tgctggttcc antgcaggga aaatggttga tcnaactgtc caagaaaacc   480
actacgtcca taccaatcca ctaattgccn gccgcctgca ggttcaacca tattggggaa   540
naactcccn ccgccgtttg ggattgncat naacctttga aatttttcc tattanttgt   600
cccctaaaa taaaccnttg ggcnttaatc cattgggtcc atancttntt tncccggttt   660
ttaaaanttg tttatcccgc cncccnattt cccccccaac tttccaaaac ccgaaaccnt   720
tnaaatttnt tnaaaccctg gggggttccc nnaattnnan ttnaanctnc c           771
```

<210> 242
<211> 167
<212> DNA
<213> Homo sapien

<400> 242
```
tgggcacctt caatatcggg ctcatcgata acatcacgct gctgatgctg ctgttgctgg    60
tcctctctag gaacctctgg attttcaaat tctttgagga attcatccaa attatctgcc   120
tctcctcctt tcctcctttt tctaaggtct tctggtacaa gcggtca                167
```

<210> 243
<211> 338
<212> DNA
<213> Homo sapien

<400> 243
```
ttgggcacct tcaatatcta ctgatctaaa tagtgtggtt tgaggcctct tgttcctggc    60
taaaaatcct tggcaagagt caatctccac tttacaatag aggtaaaaat cttacaatgg   120
atattcttga caaagctagc atagagacag caattttaca caaggtattt ttcacctgtt   180
taataacagt ggttttccta cacccatagg gtgccaccaa gggaggagtg cacagttgca   240
gaaacaaatt aagatactga agacaacact acttaccatt tcccgtatag ctaaccacca   300
gttcaactgt acatgtatgt tcttatgggc aatcaaga                          338
```

<210> 244
<211> 346
<212> DNA
<213> Homo sapien

<400> 244

```
tttttggctc ccatacagca cactctcatg ggaaatgtct gttctaaggt caacccataa   60
tgcaaaaatc atcaatatac ttgaagatcc ccgtgtaagg tacaatgtat ttaatattat  120
cactgataca attgatccaa taccagtttt agtctggcat tgaatcaaat cactgttttt  180
gttgtataaa aagagaaata tttagcttat atttaagtac catattgtaa gaaaaaagat  240
gcttatcttt acatgctaaa atcatgatct gtacattggt gcagtgaata ttactgtaaa  300
agggaagaag gaatgaagac gagctaagga tattgaaggt gcccaa                 346
```

        <210> 245
        <211> 521
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(521)
        <223> n = A,T,C or G

        <400> 245

```
accaatccca cacggatact gagggacaag tatatcatcc catttcatcc ctacagcagc   60
aacttcatga ggcaggagtt attagtccca ttttacagaa gaggaaactg agacttaggg  120
agatcaagta atttgcccag gtcgcacaat tagtgataga gccagggctt gaagcgacgt  180
ctgtcttaag ccaatgaccc ctgcagatta ttagagcaac tgttctccac aacagtgtaa  240
gcctcttgct anaagctcag gtccacaagg gcagagattt ttgtctgttt tgctcattgc  300
tccttcccca ttgcttagag cagggtctgc cacgaancag gttctcaatg catagttatt  360
aaatgtatat aagagcaaac atatgttaca gagaactttc tgtatgcttg tcacttacat  420
gaatcacctg tganatgggt atgcttgttc cccantgttg cagatnaaga tattgaangt  480
gcccaaatca ctanttgcgg gcgcctgcan gtccancata t                     521
```

        <210> 246
        <211> 482
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(482)
        <223> n = A,T,C or G

        <400> 246

```
tggaaccaat ccaaataccc atcaatgata gactggataa agaaaatttg gcacatgttc   60
accatgaaat actatgcagc cataaaaaag gatgagttca tatcctttgc agggacatgg  120
atgaagctgg agaccatcat tctcagcaaa ctaacaaggg aacagaaaac caaacactgc  180
atgttctcac tcttaagtgg gagctgaaca atgagaacac atggacacag ggaggggaac  240
atcacacagt ggggcctgct ggtgggtagg ggtctagggg agggatagca ttaggagaaa  300
tacctaatgt agatgacggg ttgatgggtg cagcaaacca ccatgacacg tgtataccta  360
tgtaacaaac ctgcatgttc tgcacatgta ccccagaact taaagtgtta ataaaaaaat  420
taagaaaaaa gttaagtatg tcatagatac ataaatatt gtanatattg aaggtgccca   480
aa                                                                 482
```

        <210> 247
        <211> 474

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 247
ttcgatacag gcacagagta agcagaaaaa tggctgtggt ttaaccaagt gagtacagtt   60
aagtgagaga ggggcagaga agacaagggc atatgcaggg ggtgattata acaggtggtt   120
gtgctgggaa gtgagggtac tcggggatga ggaacagtga aaaagtggca aaaagtggta   180
agatcagtga attgtacttc tccagaattt gatttctggn ggagtcaaat aactatccag   240
tttggggtat catanggcaa cagttgaggt ataggaggta gaagtcncag tgggataatt   300
gaggttatga anggtttggt actgactggt actgacaang tctgggttat gaccatggga   360
atgaatgact gtanaagcgt anaggatgaa actattccac ganaaagggg tccnaaaact   420
aaaaannnaa gnnnnngggg aatattattt atgtggatat tgaangtgcc caaa   474

<210> 248
<211> 355
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 248
ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt   60.
ccggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc   120
cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg   180
attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag   240
ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat   300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa   355

<210> 249
<211> 434
<212> DNA
<213> Homo sapien

<400> 249
ttggattggt cctccaggag aacaagggga aaaaggtgac cgagggctcc ctggaactca   60
aggatctcca ggagcaaaag gggatggggg aattcctggt cctgctggtc ccttaggtcc   120
acctggtcct ccaggcttac caggtcctca aggcccaaag ggtaacaaag gctctactgg   180
acccgctggc cagaaaggtg acagtggtct tccagggcct cctgggcctc caggtccacc   240
tggtgaagtc attcagcctt taccaatctt gtcctccaaa aaaacgagaa gacatactga   300
aggcatgcaa gcagatgcag atgataatat tcttgattac tcggatggaa tggaagaaat   360
atttggttcc ctcaattccc tgaaacaaga catcgagcat atgaaatttc caatgggtac   420
tcagaccaat ccaa   434

<210> 250
<211> 430
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(430)
<223> n = A,T,C or G

<400> 250
```
tggattggtc acatggcaga gacaggattc caaggcagtg agaggaggat acaatgcttc      60
tcactagtta ttattattta ttttattttt gagatgaagt ctcgctttgt ctcccaggct     120
ggagagcggt ggtgcgatct tggctctctg caacccccgc ctcaagcaat tctcctgtct     180
tagcctcgcg ggtagatgga attacaggcg cccaccgcca tgcccaacta attttttttgt    240
gtcttcagta gagacagggt ttcgccatgt tgggcaggct ggtcttgaac tcctgacctc     300
nagtgatctg ccctcctcgg cctcacaaag tgctggaatt acaggcatgg gctgctgcac     360
ccagtcaact tctcactagt tatggcctta tcattttcac cacattctat tggcccaaaa     420
aaaaaaaaan                                                            430
```

<210> 251
<211> 329
<212> DNA
<213> Homo sapien

<400> 251
```
tggtactcca ccatyatggg gtcaaccgcc atcctcgccc tcctcctggc tgttctccaa      60
ggagtctgtg ccgaggtgca gctgrtgcag tctggagcag aggtgaaaaa gtccggggag     120
tctctgaaga tctcctgtaa gggttctgga tacacctta agatctactg gatcgcctgg      180
gtgcgccagt tgcccgggaa aggcctggag tggatggggc tcatctttcc tgatgactct     240
gataccagat acagcccgtc cttccaaggc caggtcacca tctcagtcga taagtccatc     300
agcaccgcct atctgcagtg gagtaccaa                                       329
```

<210> 252
<211> 536
<212> DNA
<213> Homo sapien

<400> 252
```
tggtactcca ctcagcccaa ccttaattaa gaattaagag ggaacctatt actattctcc      60
caggctcctc tgctctaacc aggcttctgg gacagtatta gaaaaggatg tctcaacaag     120
tatgtagatc ctgtactggc ctaagaagtt aaactgagaa tagcataaat cagaccaaac     180
ttaatggtcg ttgagacttg tgtcctggag cagctgggat aggaaaactt ttgggcagca     240
agaggaagaa ctgcctggaa gggggcatca tgttaaaaat tacaagggga acccacacca     300
ggccccctc ccagctctca gcctagagta ttagcatttc tcagctagag actcacaact     360
tccttgctta gaatgtgcca ccggggggag tccctgtggg tgatgaggct ctcaagagtg     420
agagtggcat cctatcttct gtgtgcccac aggagcctgg cccgagactt agcaggtgaa     480
gtttctggtc caggctttgc ccttgactca ctatgtgacc tctggtggag taccaa        536
```

<210> 253
<211> 507

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(507)
<223> n = A,T,C or G

<400> 253
ntgttgcgat cccagtaact cgggaagctg aggcgggagg atcacctgag ctcaggaggt      60
tgaggccgca gtgagccggg accacgccac tacactccag cctggggcat agagtgagac     120
cctccaagac agaaaagaaa agaaaggaag ggaaagggaa agggaaaagg aaaaggaaaa     180
ggaaaaggaa aaggaaaaga caagacaaaa caagacttga atttggatct cctgacttca     240
attttatgtt ctttctacac cacaattcct ctgcttacta agatgataat ttagaaaccc     300
ctcgttccat tctttacagc aagctggaag tttggtcaag taattacaat aatagtaaca     360
aatttgaata ttatatgcca ggtgtttttc attcctgctc tcacttaatt ctcaccactc     420
tgatataaat acaattgctg ccgggtgtgg tggctcatgc ctgtaatccc ggcactttgg     480
gagaccgagg tgggcggats gcaacaa                                          507

<210> 254
<211> 222
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(222)
<223> n = A,T,C or G

<400> 254
ttggattggt cactgtgagg aagccaaatc ggatccgaga gtctttttct aaaggccagt      60
actggccaca ctttctcctg ccgccttcct caaagctgaa gacacacaga gcaaggcgct     120
tctgtttttac tccccaatgg taactccaaa ccatagatgg ttagctnccc tgctcatctt     180
tccacatccc tgctattcag tatagtccgt ggaccaatcc aa                        222

<210> 255
<211> 463
<212> DNA
<213> Homo sapien

<400> 255
tgttgcgatc cataaatgct gaaatggaaa taaacaacat gatgagggag gattaagttg      60
gggagggagc acattaaggt ggccatgaag tttgttggaa gaagtgactt ttgaacaagg     120
ccttggtgtt aagagctgat gagagtgtcc cagacagagg ggccactggt acaatagacg     180
agatgggaga gggcttggaa ggtgtgcgaa ataggaagga gtttgttctg gtatgagtct     240
agtgaacaca gaggcgagag gccctggtgg gtgcagctgg agagttatgc agaataacat     300
taggccctgt gggggactgt agactgtcag caataatcca cagtttggat tttattctaa     360
gagtgatggg aagccgtgga aaggggggtta agcaaggagt gaaattatca gatttacagt     420
gataaaaata aattggtctg gctactgggg aaaaaaaaaa aaa                        463

<210> 256
```

```
        <211> 262
        <212> DNA
        <213> Homo sapien

        <400> 256
ttggattggt caacctgctc aactctacyt ttcctccttc ttcctaaaaa attaatgaat          60
ccaatacatt aatgccaaaa cccttgggtt ttatcaatat ttctgttaaa aagtattatc         120
cagaactgga cataatacta cataataata cataacaacc ccttcatctg gatgcaaaca         180
tctattaata tagcttaaga tcactttcac tttacagaag caacatcctg ttgatgttat         240
tttgatgttt ggaccaatcc aa                                                   262


        <210> 257
        <211> 461
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(461)
        <223> n = A,T,C or G

        <400> 257
gnggnnnnnn nnncaattcg actcngttcc cntggtancc ggtcgacatg gccgcgggat          60
taccgcttgt nnctgggggt gtatggggga ctatgaccgc ttgtagctgg gggtgtatgg         120
gggactatga ccgcttgtag mtggkggtgt atggggggact atgaccgctt gtcgggtggt         180
cggataaacc gacgcaaggg acgtgatcga agctgcgttc ccgctctttc gcatcggtag         240
ggatcatgga cagcaatatc cgcattcgyc tgaaggcgtt cgaccatcgc gtgctcgatc         300
aggcgaccgg cgacatcgcc gacaccgcac gccgtaccgg cgcgctcatc cgcggtccga         360
tcccgcttcc cacgcgcatc gagaagttca cggtcaaccg tggcccgcac gtcgacaaga         420
agtcgcgcga gcagttcgag gtgcgtacct acaagcggtc a                             461


        <210> 258
        <211> 332
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(332)
        <223> n = A,T,C or G

        <400> 258
tgaccgcttg tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg          60
ggggactatg accgcttgta gctgggggtg tatggggggac tatgaccgct tgtagctggg        120
ggtgtatggg ggactaggac cgcttgtagc tggggtgta tggggggacta tgaccgcttg         180
tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg ggggactatg         240
accgcttgta nctgggggtg tatggggggac tatgaccgct tgtgctgcct gggggatggg        300
aggagagttg tggttgggga aaaaaaaaaa aa                                        332


        <210> 259
        <211> 291
```

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(291)
<223> n = A,T,C or G

<400> 259
taccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt      60
gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt     120
gaccgcttgt gaccgcttgt nacnggggt gtctggggga ctatgannga ntgtnactgg     180
gggtgtctgg gggnctatga nngantgtna cnggggtgt ctgggggact atganngact     240
gtgcnncctg ggggatcnga ggagantngn ggntagngat ggttngggan a             291


<210> 260
<211> 238
<212> DNA
<213> Homo sapien

<400> 260
taagagggta ctggttaaaa tacaggaaat ctggggtaat gaggcagaga accaggatac      60
tttgaggtca gggatgaaaa ctagaatttt tttctttttt tttgcctgag aaacttgctg     120
ctctgaagag gcccatgtat taattgcttt gatcttcctt ttcttacagc cctttcaagg     180
gcagagccct ccttatcctg aaggaatctt atccttagct atagtatgta ccctctta       238


<210> 261
<211> 746
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 261
ttggggcacct tcaatatcaa tagctaacat ttattgagtg tttatcgtat cataaaacac      60
tgttctaagc ctttaaacgt actaattcat ttaatgctca taatcacttt agaaggtggg     120
tactagtatt agtctcattt acagatgcaa catgcaggca cagagaggtt aattaacttg     180
cccaaggtaa cacagctaag aaatagaaaa aatattgaat ctggaaagtt gggcttctgg     240
gtaacccaca gagtcttcaa tgagcctggg gcctcactca gtttgctttt acaaagcgaa     300
tgagtaacat cacttaattc agtgagtagg ccaaatggag gtcagctacg agtttctgct     360
gttcttgcag tggactgaca gatgtttaca acgtctggcc atcagtwaat ggactgatta     420
tcattgggaw gtgggtgggc tgaatgttgg ccagtgaagt ttattcawgc catattttta     480
tgtttaggat gacttttggc tggtcctagg gcaagctctg tctgscacgg aacacagaat     540
wacacaggga ccccctcaat ttctggtgtg gctagaacca tgaaccactg gttgggggaa     600
caagcggtca aaacctaagt gcggccggct ggcagggtcc acccatatgg ggaaaactcc     660
cnacgcgttt ggaatgcctn agctngaatt attctaanag ttgtccncnt aaaattagcc     720
tgggcgttaa tcanggggtcn naagcc                                         746
```

```
<210> 262
<211> 588
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(588)
<223> n = A,T,C or G

<400> 262
tgaccgcttg tcatctcaca tggggtcctg cacgcttttg cctttgtagg aaacctgaca      60
tttgtctgtt tcttctttct cttttccttc ccatatcctc ctaatttacg tttgacttgt     120
ttgctgagga ggcaggagct agagactgct gtgagctcat aggggtggga agtttatcct     180
tcaagtcccg cccactcatc actgcttctc accttccccct gaccaggctt acaagtgggt    240
tcttgcctgc tttccctttg gacccaacaa gcccctgtaa tgagtgtgca tgactctgac     300
agctgtggac tcagggtcct tggctacagc tgccatgtaa aatatctcat ccagttctcg     360
caaattgtta aaataaccac atttcttaga ttccagtacc caaatcatgt ctttacgaac     420
tgctcctcac acccagaagt ggcacaataa ttcttgggga attattactt tttttttttct    480
ctctnttnnc gnnngnnnng gnnngnccag gaattaccac nttggaagac ctggccngaa     540
tttattatan aggggagccg attnttttc ctaacacaaa gcgggtca                   588


<210> 263
<211> 730
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(730)
<223> n = A,T,C or G

<400> 263
tttttttttt tttggcctga gcaactgaaa ttatgaaatt tccatatact caaaagagta      60
agactgcaaa aagattaaat gtaaaagttg tcttgtatac agtaatgttt aagatatcta     120
ttanatttat aaatggaaaa ttagggcatt tggatataca agttgaaaat tcaggagtga     180
ggttgggctg gctgggtata tactgaaaac tgtcagtaca cagatgacat ctaaaaccac     240
aaatctggtt ttatttagc agtgatatgt gtcactccca caaaagcctt cccaattggc      300
ctcagcatac acaacaagtc acctccccac agccctctac acataaacaa attccttagt     360
ttagttcagg aggaaatgcg ccctttccct tccgctctag gtgaccgcaa ggcccagttc     420
tcgtcaccaa gatgttaagg gaagtctgcc aaagaggcat ctgaaaggaa ataaggggaa     480
tgggagtgac cacaaaggaa agccaaggan aaactttgga gaccgtttct aganccctgg     540
catttcacaa caaaactcng gaacaaacct tgtctcatca atcatttaag cccttcgttt     600
ggannagact ttctgaactg ggcgctgaac ataanncctca ttgaatgtct tcacagtctc    660
ccagctgaag gcacaccttg ggccagaagg ggaatcttcc aggtcctcaa nacagggctc     720
gcccttttgnc                                                           730


<210> 264
<211> 715
<212> DNA
<213> Homo sapien
```

```
        <220>
        <221> misc_feature
        <222> (1)...(715)
        <223> n = A,T,C or G

        <400> 264
tttttttttt tttggccagt atgatagtct ctaccactat attgaagctc ttaggtcatt        60
tacacttaat gtggttatag atgctgttga gcttacttct accaccttgc tatttctccc       120
gtctcttttt tgttcctttt ctcttctttt cctcccttat tttataattg aattttttag       180
gattctattt tatatagatt tatcagctat aacactttgt attcttttgt tttgtggttc       240
ttctgtcatt tcaatgtgca tcttaaactc atcacaatct attttcaaat aatatcatat       300
aaccttacat ataatgtaag aatctaccac catatatttc catttctccc ttccatccta       360
tgtntgtcat atttttttcct ttatatatgt tttaaagaca taatagtata tgggaggttt      420
ttgcttaaaa tgtgatcaat attccttcaa ngaaacgtaa aaattcaaaa taaatntctg       480
tttattctca aatnnaccta atatttccta ccatntctna tacntttcaa gaatctgaag       540
gcattggttt tttccggctt aagaacctcc tctaaagcac tctaagcaga attaagtctt       600
ctgggagagg aattctccca agcttgggcc ttnanntgta ctccntnang gttaaantt        660
ggccgggaaa tagaaattcc aagttaacag gntanttttt nttttnttn tcncc            715


        <210> 265
        <211> 152
        <212> DNA
        <213> Homo sapien

        <400> 265
ttttttttttt tttcccaaca caaagcacca ttatctttcc tcacaatttt caacatagtt       60
tgattcccat gaagaggtta tgatttctaa agaaaacatg gctactatac tatcaatcag       120
ggttaaatct tttttttttg agacggagtt ta                                     152


        <210> 266
        <211> 193
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(193)
        <223> n = A,T,C or G

        <400> 266
taaactccgt ccccttctta atcaatatgg aggctaccca ctccacatta ccttctttc        60
aagggactgt ttccgtaact gttgtgggta ttcacgacca ggcttctaaa cctcttaaaa       120
ctccccaatt ctggtgccaa cttggacaac atgctttttt tttttttttt ttttttttn       180
gagacggagt tta                                                          193


        <210> 267
        <211> 460
        <212> DNA
        <213> Homo sapien
```

```
        <400> 267
tgttgcgatc ccttaagcat gggtgctatt aaaaaaatgg tggagaagaa aatacctgga      60
atttacgtct tatctttaga gattgggaag accctgatgg aggacgtgga gaacagcttc     120
ttcttgaatg tcaattccca agtaacaaca gtgtgtcagg cacttgctaa ggatcctaaa     180
ttgcagcaag gctacaatgc tatgggattc tcccagggag gccaatttct gagggcagtg     240
gctcagagat gcccttcacc tcccatgatc aatctgatct cggttggggg acaacatcaa     300
ggtgtttttg gactccctcg atgcccagga gagagctctc acatctgtga cttcatccga     360
aaaacactga atgctggggc gtactccaaa gttgttcagg aacgcctcgt gcaagccgaa     420
tactggcatg acccataaaa ggaggatgtg gatcgcaaca                           460


        <210> 268
        <211> 533
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(533)
        <223> n = A,T,C or G


        <400> 268
tgttgcgatc cgttgataga atagcgacgt ggtaatgagt gcatggcacg cctccgactt      60
accttcgccc gtggggaccc cgagtacgtc tacggcgtcg tcacttagag taccctctgg     120
acgcccgggc gcgttcgatt taccggaagc gcgagctgca gtgggcttgc gccccccggcc    180
aaattctttg gggggtttaa ggccgcgggg aatttgaggt atctctatca gtatgtagcc     240
aagttggaac agtcgccatt cccgaaatcg ctttctttga atccgcaccg cctccagcat     300
tgcctcattc atcaacctga aggcacgcat aagtgacggt tgtgtcttca gcagctccac     360
tccataacta gcgcgctcga cctcgtcttc gtacgcgcca ggtccgtgcg tgcgaattcc     420
caactccggt gagttgcgca tttcaagttn cgaaactgtt cgcctccacn atttggcatg     480
ttcacgcatg acacggaata aactcgtcca gtaccgggaa tgggatcgca aca            533


        <210> 269
        <211> 50
        <212> DNA
        <213> Homo sapien


        <400> 269
ttttttttt ttcgcctgaa ttagctacag atcctcctca caagcggtca                  50


        <210> 270
        <211> 519
        <212> DNA
        <213> Homo sapien


        <400> 270
tgttgcgatc caaataaccc accagcttct tgcacacttc gcagaagcca ccgtcctttg      60
gctgagtcac gtgaacggtc agtgcaagca gccgcgtgcc agagcagagg tgcagcatgc     120
tgcacaccag ctcagggctg acctcctcca gcaggatgga caggatggag ctgccgtacg     180
tgtccaccac ctcctggcac tcttccgaca gggacttcgg cagcttcgag cacattttgt     240
caaaagcgtc gagtatttct ttctcagtct tgttgttgtc aatcagcttg gtcacctcct     300
tcaccaggaa ttcacacacc tcacagtaaa catcagactt tgctgggacc tcgtgcttct     360
```

```
taatgggctc caccagttcc agggcaggga tgacattctt ggaggccact ttggcgggga    420
ccagagtctg catgggcatc tctttcacct catcacagaa cccaaccagc gcacagatct    480
ccttgggttg catgtgcatc atcatctggg atcgcaaca                          519
```

<210> 271
<211> 457
<212> DNA
<213> Homo sapien

<400> 271
```
tttttttttt ttcgggcggc gaccggacgt gcactcctcc agtagcggct gcacgtcgtg     60
ccaatggccc gctatgagga ggtgagcgtg tccggcttcg aggagttcca ccgggccgtg    120
gaacagcaca atggcaagac cattttcgcc tactttacgg gttctaagga cgccgggggg    180
aaaagctggt gccccgactg cgtgcaggct gaaccagtcg tacgagaggg gctgaagcac    240
attagtgaag gatgtgtgtt catctactgc caagtaggag aagagcctta ttggaaagat    300
ccaaataatg acttcagaaa aaacttgaaa gtaacagcag tgcctacact acttaagtat    360
ggaacacctc aaaaactggt agaatctgag tgtcttcagg ccaacctggt ggaaatgttg    420
ttctctgaag attaagattt taggatggca atcaaga                            457
```

<210> 272
<211> 102
<212> DNA
<213> Homo sapien

<400> 272
```
tttttttttt ttgggcaaca acctgaatac cttttcaagg ctctggcttg ggctcaagcc     60
cgcaggggaa atgcaactgg ccaggtcaca gggcaatcaa ga                       102
```

<210> 273
<211> 455
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(455)
<223> n = A,T,C or G

<400> 273
```
tttttttttt ttggcaatca acaggtttaa gtcttcggcc gaagttaatc tcgtgttttt     60
ggcaatcaac aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaacag    120
gtttaagtct tcggccgaag ttaatctcgt gtttttggca atcaacaggt ttaagtcttc    180
ggccgaagtt aatctcgtgt ttttggcaat caacaggttt aagtcttcgg ccgaagttaa    240
tctcgtgttt ttggcaatca acaggtttaa gtcttcggcc gaagttaatc tcgtgttttt    300
ggcaatcaag aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaacag    360
gtttaagtct tcggccgaan ttaatctcgt gtttttggca atcaacaggt ttaantcttc    420
ggccgaagtt aatctcgtgt ttttggcaat caana                              455
```

<210> 274
<211> 461
<212> DNA

<213> Homo sapien

<400> 274

```
tttttttttt ttggccaata cccttgatga acatcaatgt gaaaatcctc ggtaaaatac      60
tggcaaacca aatccagcag cacatcaaaa agcttatcca ccatgatcaa gtgggcttca     120
tccctgggat gcaaggctgg ttcaacataa gaaaatcaat aaatgtaatc catcacataa     180
acagaaccaa agacaaaaac cacatgatta tctcaataga tgcagaaaag gccttggaca     240
aattcaacag cccttcatgc taaacactct taataaacta gatattgatg gaatgtatct     300
caaaataata agagctattt atgacaaacc cacagccaat atcatactga atgggcaaag     360
actggaagca ttccctttga aaactggcac aagacaagga tgccctctct caccgctcct     420
attcaacata gtattggaag ttctggccag ggcaatcaag a                        461
```

<210> 275
<211> 729
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(729)
<223> n = A,T,C or G

<400> 275

```
tttttttttt ttggccaaca ccaagtcttc cacgtgggag gttttattat gttttacaac      60
catgaaaaca taggaaggtg gctgttacag caaacatttc agatagacga atcggccaag     120
ctccccaaac cccaccttca cagcctcttc cacacgtctc ccanagattg ttgtccttca     180
cttgcaaatt canggatgtt ggaagtngac atttnnagtn gcnggaaccc catcagtgaa     240
ncantaagca gaantacgat gactttgana nacanctgat gaagaacacn ctacnganaa     300
cccttctcnt cgtgttanga tctcnngtcc ntcactaatg cggcccctg cnggtccacc      360
atttgggaga actccccccn cgttggatcc cccttgagt ntcccattct ngtccccan      420
accngncttg ngngncantn cnncctcnca ccntgtttcc ctgnngtaa aatnngtttt      480
nccgccnccc naattcccac ccnaatcaca gcgaanccng aaggccttcn naagtgttta     540
angcccngng gtttcctcnt ntanttgcag cctaccctcc cncttnnnnt tncgngttgg     600
tcgcgccctg gncncgcctn gttcctcttt nnggnnacaa cctngntcnn nggcncntcn     660
nnnctnttcc tnnnactagc tngcctntcc ncnccgnggn ncanngcaca ttncncnnac     720
tntgtnncc                                                            729
```

<210> 276
<211> 339
<212> DNA
<213> Homo sapien

<400> 276

```
tgacctgaca tgtagtagat acttaataaa tatttgtgga atgaatggat gaagtggagt      60
tacagagaaa aatagaaaag tacaaattgt tgtcagtgtt ttgaaggaaa attatgatct     120
ttcccaaagt tctgacttca ttctaagaca gggttagtat ctccatacat aattttactt     180
gcttttgaaa atcaaatgag ataatctatt tagattgata atttatttag actggctata     240
aactattaag tgctagcaaa tatacatttt aatctcattt tccacctctt gtgatatagc     300
tatgtaggtg ttgactttaa tggatgtcag gtcaatccc                            339
```

<210> 277

```
<211> 664
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(664)
<223> n = A,T,C or G

<400> 277
tgacctgaca tccataacaa aatctttctc cattatattc ttctagggga atttcttgaa        60
aagcatccaa aggaaacaaa tgatggtaag accgtgccaa gtggggagca gacaccaaag       120
taagaccaca gattttacat tcaacaggta gctcacagta ctttgcccga cactgtgggc       180
agaaatagcc tcctaatgta agccctggct cagtattgcc atccaaatgc gccatgctga       240
aagagggttt tgcatcctgg tcagatnaag aagcaatggt gtgctgagga aatcccatac       300
gaataagtga gcattcagaa cttgagctag caggaggagg actaagatga tgtgtgagca       360
actctttgta atggctttca tctaaaataa catggtacgt gccaccagtt tcacgagcaa       420
gtacagtgca aacgcgaact tctgcagaca atccaataac agatactcta attttagctg       480
cctttagggt cttgattaaa tcataaatat tagatggatc gcaagttgta aggntgctaa       540
aagatgatta gtacttctcg acttgtatgt ccaggcatgt tgttttaaan tctgccttag       600
nccctgctta ggggaatttt taaagaagat ggctctccat gttcanggtc aatcacnaat       660
tgcc                                                                    664


<210> 278
<211> 452
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(452)
<223> n = A,T,C or G

<400> 278
tgacctgaca ttgaggaaga gcacacacct ctgaaattcc ttaggttcag aagggcattt        60
gacacagagt gggcctctga taattcatga aatgcattct gaagtcatcc agaatggagg       120
ctgcaatctg ctgtgctttg ggggttgcct cactgtgctc ctggatatca cacaaaagct       180
gcaatccttc ttcttcaact aacattttgc agtatttgct gggattttta ctgcagacat       240
gatacatagc ccatagtgcc cagagctgaa cctctggttg agagaagttg ccaaggagcg       300
ggaaaaatgt cttgaaagat ctataggtca ccaatgctgt catcttacaa cttgaacttg       360
gccaattctg tatggttgca tgcagatctt ggagaagagt acgcctctgg aagtcacggg       420
atatccaaan ctgtctgtca gatgtcaggt ca                                    452


<210> 279
<211> 274
<212> DNA
<213> Homo sapien

<400> 279
tttttttttt ttcggcaagg caaatttact tctgcaaaag ggtgctgctt gcacttttgg        60
ccactgcgag agcacaccaa acaaagtagg gaaggggttt ttatccctaa cgcggttatt       120
```

```
ccctggttct gtgtcgtgtc cccattggct ggagtcagac tgcacaatct acactgaccc        180
aactggctac tgtttaaaat tgaatatgaa taattaggta ggaaggggga ggctgtttgt        240
tacggtacaa gacgtgtttg ggcatgtcag gtca                                    274
```

```
        <210> 280
        <211> 272
        <212> DNA
        <213> Homo sapien


        <400> 280
tacctgacat ggagaaataa cttgtagtat tttgcgtgca atggaatact atatgagggt         60
gaaaatgaat gaactagcaa tgcgtgtatc aacatgaata aatccccaaa acataataat        120
gttgaatgga aaaggtgagt ttcagaagga tatatatgcc ctctaaatcc atttatgtaa        180
acctttaaaa aactacatta tttatggtca taagtccatc cagaaaatat ttaaaaacct        240
acatgggatt gataactact gatgtcaggt ca                                      272
```

```
        <210> 281
        <211> 431
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(431)
        <223> n = A,T,C or G


        <400> 281
tttttttttt ttggccaata gcatgattta aacattggaa aaagtcaaat gagcaatgcg         60
aatttttatg ttctcttgaa taatcaaaag agtaggcaac attggttcct cattcttgaa        120
tagcattaat cagaaaatat tgcatagcct ctagcctcct tagagtaggt gtgctctctc        180
aaatatatca tagtcccaca gtttatttca tgtatatttt ctgcctgaat cacatagaca        240
tttgaatttg caacgcctga tgtaaatata taaattctta ccaatcagaa acatagcaag        300
aaattcaggg acttggtcat yatcagggta tgacagcana tccctgtara aacactgata        360
cacactcaca cacgtatgca acgtggagat gtcgcyttww kkktwywcwm rmrycrwcgn        420
aatcacttan n                                                             431
```

```
        <210> 282
        <211> 98
        <212> DNA
        <213> Homo sapien


        <400> 282
attcgattcg atgcttgagc ccaggagttc aagactgcag tgagccactg cacttcaggc         60
tggacaacag agcgagtccc tgtgccaaaa aaaaaaaa                                 98
```

```
        <210> 283
        <211> 764
        <212> DNA
        <213> Homo sapien


        <220>
```

```
<221> misc_feature
<222> (1)...(764)
<223> n = A,T,C or G

<400> 283
tttttttttt ttcgcaagca cgtgcacttt attgaatgac actgtagaca ggtgtgtggg      60
tataaactgc tgtatctagg ggcaggacca aggggggcagg ggcaacagcc ccagcgtgca     120
gggccascat tgcacagtgg astgcaaagg ttgcaggcta tgggcggcta ctavtaaccc     180
cgttttttcct gtattatctg taacataata tggtagactg tcacagagcc gaatwccart     240
hacasgatga atccaawggt caygaggatg cccasaatca gggcccasat sttcaggcac     300
ttggcggtgg gggcatasgc ctgkgccccg gtcacgtcsc caaccwtcty cctgtccta     360
cmcttgawtc cncnccttnn nntnccntna tntgcccgcc cncctcctng ngtcaaccng     420
natctgcact anctccctcn cccccttntgg antctcntcc ttcaantaan nttatccttn     480
acnccccccct cnccttttccc ctnccncccn tnatcccngn nccnctatca ntcntnccct     540
cnctntnctn cnnatcgttc cncctnntaa ctacnctttn nacnanncct cactnatncc     600
ngnnanttct ttccttccct cccnacgcnn tgcgtgcgcc cgtctngcct nnnctncgna     660
cccnnacttt atttaccttt ncaccctagc nctctacttn acccanccnc tcctacctcc     720
nggnccaccc nnccctnatc nctnnctctn tcnnctcntt cccc                       764


<210> 284
<211> 157
<212> DNA
<213> Homo sapien


<400> 284
caagtgtagg cacagtgatg aaagcctgga gcaaacacaa tctgtgggta attaacgttt      60
atttctcccc ttccaggaac gtcttgcatg gatgatcaaa gatcagctcc tggtcaacat     120
aaataagcta gtttaagata cgttccccta cacttga                              157


<210> 285
<211> 150
<212> DNA
<213> Homo sapien


<400> 285
attcgattgt actcagacaa caatatgcta agtggaagaa gtcagtcaca aaagaccaca      60
tactgtatga cttcatttac attaagtgtc cagaataggc aaatccgtag agacagaaag     120
tagatgagca gctgcctagg tctgagtaca                                      150


<210> 286
<211> 219
<212> DNA
<213> Homo sapien


<400> 286
attcgatttt ttttttttg gccatgatga aattcttact ccctcagatt ttttgtctgg      60
ataaatgcaa gtctcaccac cagatgtgaa attacagtaa actttgaagg aatctcctga     120
gcaaccttgg ttaggatcaa tccaatattc accatctggg aagtcaggat ggctgagttg     180
caggtcttta caagttcggg ctggattggt ctgagtaca                            219


<210> 287
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<211> 196
<212> DNA
<213> Homo sapien

<400> 287
```
attcgattct tgaggctacc aggagctagg agaagaggca tggaacaaat tttccctcat      60
atccatactc agaaggaacc aaccctgctg acaccttaat ttcagcttct ggcctctaga     120
actgtgagag agtacatttc tcttggttta agccaagaga atctgtcttt tggtacttta     180
tatcatagcc tcaaga                                                     196
```

<210> 288
<211> 199
<212> DNA
<213> Homo sapien

<400> 288
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attcgatttc agtccagtcc cagaacccac attgtcaatt actactctgt araagattca      60
tttgttgaaa ttcattgagt aaaacattta tgatccctta atatatgcca attaccatgc     120
taggtactga agattcaagt gaccgagatg ctagcccttg ggttcaagtg atccctctcc     180
cagagtgcac tggactgaa                                                  199
```

<210> 289
<211> 182
<212> DNA
<213> Homo sapien

<400> 289
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attcgattct tgaggctaca aacctgtaca gtatgttact ctactgaata ctgtaggcaa      60
tagtaataca gaagcaagta tctgtatatg taaacattaa aaaggtacag tgaaacttca     120
gtattataat cttagggacc accattatat atgtggtcca tcattggcca aaaaaaaaaa     180
aa                                                                   182
```

<210> 290
<211> 1646
<212> DNA
<213> Homo sapien

<400> 290
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ggcacgagga gaaatgtaat tccatatttt atttgaaact tattccatat tttaattgga      60
tattgagtga ttgggttatc aaacacccac aaactttaat tttgttaaat ttatatggct     120
ttgaaataga agtataagtt gctaccattt tttgataaca ttgaaagata gtattttacc     180
atctttaatc atcttggaaa atacaagtcc tgtgaacaac cactctttca cctagcagca     240
tgaggccaaa agtaaaggct ttaaattata acatatggga ttcttagtag tatgttttttt     300
tcttgaaact cagtggctct atctaacctt actatctcct cactctttct ctaagactaa     360
actctaggct cttaaaaatc tgcccacacc aatcttagaa gctctgaaaa gaatttgtct     420
ttaaatatct tttaatagta acatgtattt tatggaccaa attgacattt tcgactattt     480
tttccaaaaa agtcaggtga atttcagcac actgagttgg gaatttctta tcccagaaga     540
ccaaccaatt tcatatttat ttaagattga ttccatactc cgttttcaag gagaatccct     600
gcagtctcct taaaggtaga acaaatactt tctatttttt tttcaccatt gtgggattgg     660
actttaagag gtgactctaa aaaaacagag aacaaatatg tctcagttgt attaagcacg     720
gacccatatt atcatattca cttaaaaaaa tgatttcctg tgcacctttt ggcaacttct     780
```

```
cttttcaatg tagggaaaaa cttagtcacc ctgaaaaccc acaaaataaa taaaacttgt    840
agatgtgggc agaaggtttg ggggtggaca ttgtatgtgt ttaaattaaa ccctgtatca    900
ctgagaagct gttgtatggg tcagagaaaa tgaatgctta gaagctgttc acatcttcaa    960
gagcagaagc aaaccacatg tctcagctat attattattt attttttatg cataaagtga   1020
atcatttctt ctgtattaat ttccaaaggg ttttaccctc tatttaaatg ctttgaaaaa   1080
cagtgcattg acaatgggtt gatatttttc tttaaaagaa aaatataatt atgaaagcca   1140
agataatctg aagcctgttt tattttaaaa ctttttatgt tctgtggttg atgttgtttg   1200
tttgttgttt tctattttgt tggtttttta ctttgttttt tgttttgttt tgttttgttt   1260
kgcatactac atgcagttct ttaaccaatg tctgtttggc taatgtaatt aaagttgtta   1320
atttatatga gtgcatttca actatgtcaa tggtttctta atatttattg tgtagaagta   1380
ctggtaattt ttttatttac aatatgttta aagagataac agtttgatat gtttttcatgt  1440
gtttatagca gaagttattt atttctatgg cattccagcg gatattttgg tgtttgcgag   1500
gcatgcagtc aatattttgt acagttagtg gacagtattc agcaacgcct gatagcttct   1560
ttggccttat gttaaataaa aagacctgtt tgggatgtat tttttatttt taaaaaaaaa   1620
aaaaaaaaaa aaaaaaaaaa aaaaaa                                        1646
```

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        <210> 291
        <211> 1851
        <212> DNA
        <213> Homo sapien

        <400> 291
tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta     60
cttccgtgtt cttcattctt cttcaatagc cataaatctt ctagctctgg ctggctgttt    120
tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga    180
ttgctgtttt cagaagagat ttttaacatc tgttttctt tgtagtcaga aagtaactgg     240
caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag    300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata    360
cagcaagtat gagagcagtt cttccatatc tatccagcgc atttaaattc gctttttct     420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtggtgtga    480
ggccatgctt gtttttgat tcgatatcag caccgtataa gagcagtgct ttggccatta     540
atttatcttc attgtagaca gcatagtgta gagtggtatt tccatactca tctggaatat    600
ttggatcagt gccatgttcc agcaacatta acgcacattc atcttcctgg cattgtacgg    660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca    720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctc     780
tttgcttgtc cctcttgttc acatccgtgt ccctgagcat gacgatgaga tcctttctgg    840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt    900
acctgggatc catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc    960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt   1020
cttcacagag gagtcgttgt ggtctccaga agtgcccacg ttgctcttgc cgctcccct   1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct   1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaag ctgtccaccc   1200
acagaggatg agatccagaa accacaatat ccattcacaa acaaacactt ttcagccaga   1260
cacaggtact gaaatcatgt catctgcggc aacatggtgg aacctaccca atcacacatc   1320
aagagatgaa gacactgcag tatatctgca caacgtaata ctcttcatcc ataacaaaat   1380
aatataattt tcctctggag ccatatggat gaactatgaa ggaagaactc cccgaagaag   1440
ccagtcgcag agaagccaca ctgaagctct gtcctcagcc atcagcgcca cggacaggar   1500
tgtgtttctt ccccagtgat gcagcctcaa gttatcccga agctgccgca gcacacggtg   1560
gctcctgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa   1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca   1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctcagaggaa atgcttctaa   1740
```

```
cttttcccca tttagtatta tgttggctgt gggcttgtca taggtggttt ttattacttt    1800
aaggtatgtc ccttctatgc ctgtttttgct gagggtttta attctcgtgc c            1851


        <210> 292
        <211> 1851
        <212> DNA
        <213> Homo sapien


        <400> 292
tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta      60
cttccgtgtt cttcattctt cttcaatagc cataaatctt ctagctctgg ctggctgttt     120
tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga     180
ttgctgtttt cagaagagat ttttaacatc tgttttttctt tgtagtcaga aagtaactgg    240
caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag     300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata     360
cagcaagtat gagagcagtt cttccatatc tatccagcgc atttaaattc gcttttttct     420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtggtgtga     480
ggccatgctt gttttttgat tcgatatcag caccgtataa gagcagtgct ttggccatta     540
atttatcttc attgtagaca gcatagtgta gagtggtatt tccatactca tctggaatat     600
ttggatcagt gccatgttcc agcaacatta acgcacattc atcttcctgg cattgtacgg     660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca     720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct     780
tttgcttgtc cctcttgttc acatccgtgt ccctgagcat gacgatgaga tcctttctgg     840
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cgctcccctg cagcaggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt      1020
cttcacagag gagtcgttgt ggtctccaga agtgcccacg ttgctcttgc cgctcccct      1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct    1140
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acagaggatg agatccagaa accacaatat ccattcacaa acaaacactt ttcagccaga    1260
cacaggtact gaaatcatgt catctgcggc aacatggtgg aacctaccca atcacacatc    1320
aagagatgaa gacactgcag tatatctgca caacgtaata ctcttcatcc ataacaaaat    1380
aatataattt tcctctggag ccatatggat gaactatgaa ggaagaactc cccgaagaag    1440
ccagtcgcag agaagccaca ctgaagctct gtcctcagcc atcagcgcca cggacaggar    1500
tgtgtttctt ccccagtgat gcagcctcaa gttatcccga agctgccgca gcacacggtg    1560
gctcctgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa    1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca    1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctcagaggaa atgcttctaa    1740
cttttcccca tttagtatta tgttggctgt gggcttgtca taggtggttt ttattacttt    1800
aaggtatgtc ccttctatgc ctgtttttgct gagggtttta attctcgtgc c            1851


        <210> 293
        <211> 668
        <212> DNA
        <213> Homo sapien


        <400> 293
cttgagcttc caaataygga agactggccc ttacacasgt caatgttaaa atgaatgcat      60
ttcagtattt tgaagataaa attrgtagat ctataccttg ttttttgatt cgatatcagc     120
accrtataag agcagtgctt tggccattaa tttatctttc attrtagaca gcrtagtgya     180
gagtggtatt tccatactca tctggaatat ttggatcagt gccatgttcc agcaacatta     240
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acgcacattc atcttcctgg cattgtacgg cctgtcagta ttagacccaa aaacaaatta    300
catatcttag gaattcaaaa taacattcca cagctttcac caactagtta tatttaaagg    360
agaaaactca tttttatgcc atgtattgaa atcaaaccca cctcatgctg atatagttgg    420
ctactgcata cctttatcag agctgtcctc tttttgttgt caaggacatt aagttgacat    480
cgtctgtcca gcaggagttt tactacttct gaattcccat tggcagaggc cagatgtaga    540
gcagtcctat gagagtgaga agactttta ggaaattgta gtgcactagc tacagccata    600
gcaatgattc atgtaactgc aaacactgaa tagcctgcta ttactctgcc ttcaaaaaaa    660
aaaaaaaa                                                            668
```

        <210> 294
        <211> 1512
        <212> DNA
        <213> Homo sapien

        <400> 294

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gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg     60
tgggctgggc trgaatcccc tgctggggtt ggcaggtttt ggctgggatt gactttttytc    120
ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg    180
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat    240
tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag    300
tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct    360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc    420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac    480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtggtgctg ccactgcttc    540
ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagt    600
gccttcatgg agcccaggta ccacgtccgt ggagaagatc tggacaagct ccacagagct    660
gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cactgacgtg    720
aacaagaagg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca    780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag    840
aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg    900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct    960
rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa   1020
tcaaaaaaca aggtatagat ctactaattt tatcttcaaa atactgaaat gcattcattt   1080
taacattgac gtgtgtaagg gccagtcttc cgtatttgga agctcaagca taacttgaat   1140
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agaagcatta gagggtacag ttttttttt ttaaatgcac ttctggtaaa tacttttgtt   1260
gaaaacactg aatttgtaaa aggtaatact tactattttt caatttttcc ctcctaggat   1320
ttttttcccc taatgaatgt aagatggcaa aatttgccct gaaataggtt ttacatgaaa   1380
actccaagaa aagttaaaca tgtttcagtg aatagagatc ctgctccttt ggcaagttcc   1440
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tgatctcgtg cc                                                      1512
```

        <210> 295
        <211> 1853
        <212> DNA
        <213> Homo sapien

        <400> 295

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gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg     60
tgggctgggc trgaatcccc tgctggggtt ggcaggtttt ggctgggatt gactttttytc    120
ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg    180
```

```
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat   240
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tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct   360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc   420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac   480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtggtgctg ccactgcttc
540ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagy   600
gccttcatgg akcccaggta ccacgtccrt ggagaagatc tggacaagct ccacagagct   660
gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cackgaygtg   720
aacaagargg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca   780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag   840
aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg   900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct   960
rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa  1020
tcaaaaaaca agcatggcct cacaccactg ytacttggtr tacatgagca aaaacagcaa  1080
gtsgtgaaat ttttaatyaa gaaaaaagcg aatttaaaat gcrctggata gatatggaag  1140
ractgctctc atacttgctg tatgttgtgg atcagcaagt atagtcagcc ytctacttga  1200
gcaaaatrtt gatgtatctt ctcaagatct ggaaagacgg ccagagagta tgctgtttct  1260
agtcatcatc atgtaatttg ccagttactt tctgactaca aagaaaaaca gatgttaaaa  1320
atctcttctg aaaacagcaa tccagaacaa gacttaaagc tgacatcaga ggaagagtca  1380
caaaggctta aaggaagtga aaacagccag ccagaggcat ggaaactttt aaatttaaac  1440
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cctatgagac taggctttga gaatcaatag attctttttt taagaatctt ttggctagga  1560
gcggtgtctc acgcctgtaa ttccagcacc ttgagaggct gaggtgggca gatcacgaga  1620
tcaggagatc gagaccatcc tggctaacac ggtgaaaccc catctctact aaaaatacaa  1680
aaacttagct gggtgtggtg gcgggtgcct gtagtcccag ctactcagga rgctgaggca  1740
ggagaatggc atgaacccgg gaggtggagg ttgcagtgag ccgagatccg ccactacact  1800
ccagcctggg tgacagagca agactctgtc tcaaaaaaaa aaaaaaaaaa aaa          1853
```

        <210> 296
        <211> 2184
        <212> DNA
        <213> Homo sapien

        <400> 296
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aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca   120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc   180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat   240
ttattgactt gcctgtgtta daccggaaga gctggggtgt ttctcaggag ccaccgtgtg   300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc   360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg   420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta   480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga   540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga   600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca   660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata   720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggagc   780
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agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcaggggagc ggcaagagca   900
acgtggtcgc ttggggagac tacgatgaca gcgccttcat ggatcccagg taccacgtcc   960
```

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atggagaaga tctggacaag ctccacagag ctgcctggtg gggtaaagtc cccagaaagg    1020
atctcatcgt catgctcagg gacacggatg tgaacaagag ggacaagcaa aagaggactg    1080
ctctacatct ggcctctgcc aatgggaatt cagaagtagt aaaactcgtg ctggacagac    1140
gatgtcaact taatgtcctt gacaacaaaa agaggacagc tctgacaaag gccgtacaat    1200
gccaggaaga tgaatgtgcg ttaatgttgc tggaacatgg cactgatcca aatattccag    1260
atgagtatgg aaataccact ctacactatg ctgtctacaa tgaagataaa ttaatggcca    1320
aagcactgct cttatacggt gctgatatcg aatcaaaaaa caagcatggc ctcacaccac    1380
tgctacttgg tatacatgag caaaaacagc aagtggtgaa atttttaatc aagaaaaag    1440
cgaatttaaa tgcgctggat agatatggaa gaactgctct catacttgct gtatgttgtg    1500
gatcagcaag tatagtcagc cctctacttg agcaaaatgt tgatgtatct tctcaagatc    1560
tggaaagacg gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact    1620
ttctgactac aaagaaaaac agatgttaaa aatctcttct gaaaacagca atccagaaca    1680
agacttaaag ctgacatcag aggaagagtc acaaaggctt aaaggaagtg aaaacagcca    1740
gccagaggca tggaaacttt taaatttaaa cttttggttt aatgttttttt ttttttgcct    1800
taataatatt agatagtccc aaatgaaatw acctatgaga ctaggctttg agaatcaata    1860
gattcttttt ttaagaatct tttggctagg agcggtgtct cacgcctgta attccagcac    1920
cttgagaggc tgaggtgggc agatcacgag atcaggagat cgagaccatc ctggctaaca    1980
cggtgaaacc ccatctctac taaaaataca aaaacttagc tgggtgtggt ggcgggtgcc    2040
tgtagtccca gctactcagg argctgaggc aggagaatgg catgaacccg ggaggtggag    2100
gttgcagtga gccgagatcc gccactacac tccagcctgg gtgacagagc aagactctgt    2160
ctcaaaaaaa aaaaaaaaaa aaaa                                          2184
```

        <210> 297
        <211> 1855
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(1855)
        <223> n = A,T,C or G

        <400> 297

```
tgcacgcatc ggccagtgtc tgtgccacgt acactgacgc cccctgagat gtgcacgccg      60
cacgcgcacg ttgcacgcgc ggcagcggct tggctggctt gtaacggctt gcacgcgcac     120
gccgcccccg cataaccgtc agactggcct gtaacggctt gcaggcgcac gccgcacgcg     180
cgtaacggct tggctgccct gtaacggctt gcacgtgcat gctgcacgcg cgttaacggc     240
ttggctggca tgtagccgct tggcttggct ttgcattytt tgctkggctk ggcgttgkty     300
tcttggattg acgcttcctc cttggatkga cgtttcctcc ttggatkgac gtttcytyty     360
tcgcgttcct ttgctggact tgacctttty tctgctgggt ttggcattcc tttggggtgg     420
gctgggtgtt ttctccgggg gggktkgccc ttcctggggt gggcgtgggk cgcccccagg     480
gggcgtgggc tttccccggg tgggtgtggg ttttcctggg gtggggtggg ctgtgctggg     540
atccccctgc tggggttggc agggattgac ttttttcttc aaacagattg gaaacccgga     600
gtaacntgct agttggtgaa actggttggt agacgcgatc tgctggtact actgtttctc     660
ctggctgtta aaagcagatg gtggctgagg ttgattcaat gccggctgct tcttctgtga     720
agaagccatt tggtctcagg agcaagatgg gcaagtggtg cgccactgct tcccctgctg     780
caggggagc ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa     840
gacgcttggg agcaagaggt gcaagtggtg ctgcccactg cttcccctgc tgcaggggag     900
cggcaagagc aacgtggkcg cttggggaga ctacgatgac agcgccttca tggakcccag     960
gtaccacgtc crtggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt    1020
ccccagaaag gatctcatcg tcatgctcag ggacactgay gtgaacaaga rggacaagca    1080
```

```
aaagaggact gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt    1140
gctggacaga cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa    1200
ggccgtacaa tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc    1260
aaatattcca gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa    1320
attaatggcc aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaaggtata    1380
gatctactaa ttttatcttc aaaatactga aatgcattca ttttaacatt gacgtgtgta    1440
agggccagtc ttccgtattt ggaagctcaa gcataacttg aatgaaaata ttttgaaatg    1500
acctaattat ctaagacttt attttaaata ttgttatttt caaagaagca ttagagggta    1560
cagttttttt tttttaaatg cacttctggt aaatactttt gttgaaaaca ctgaatttgt    1620
aaaaggtaat acttactatt tttcaatttt tccctcctag gatttttttc ccctaatgaa    1680
tgtaagatgg caaaatttgc cctgaaatag gttttacatg aaaactccaa gaaaagttaa    1740
acatgtttca gtgaatagag atcctgctcc tttggcaagt tcctaaaaaa cagtaataga    1800
tacgaggtga tgcgcctgtc agtggcaagg tttaagatat ttctgatctc gtgcc         1855
```

```
        <210> 298
        <211> 1059
        <212> DNA
        <213> Homo sapien

        <400> 298
gcaacgtggg cacttctgga gaccacaacg actcctctgt gaagacgctt gggagcaaga     60
ggtgcaagtg gtgctgccca ctgcttcccc tgctgcaggg gagcggcaag agcaacgtgg    120
gcgcttgrgg agactmcgat gacagygcct tcatggagcc caggtaccac gtccgtggag    180
aagatctgga caagctccac agagctgccc tggtggggta aagtccccag aaaggatctc    240
atcgtcatgc tcagggacac tgaygtgaac aagarggaca gcaaaagag dactgctcta    300
catctggcct ctgccaatgg gaattcagaa gtagtaaaac tcstgctgga cagacgatgt    360
caacttaatg tccttgacaa caaaaagagg acagctctga yaaaggccgt acaatgccag    420
gaagatgaat gtgcgttaat gttgctggaa catggcactg atccaaatat tccagatgag    480
tatggaaata ccactctrca ctaygctrtc tayaatgaag ataaattaat ggccaaagca    540
ctgctcttat ayggtgctga tatcgaatca aaaaacaagg tatagatcta ctaattttat    600
cttcaaaata ctgaaatgca ttcattttaa cattgacgtg tgtaagggcc agtcttccgt    660
atttggaagc tcaagcataa cttgaatgaa aatattttga aatgacctaa ttatctaaga    720
ctttatttta aatattgtta ttttcaaaga agcattagag ggtacagttt ttttttttta    780
aatgcacttc tggtaaatac ttttgttgaa aacactgaat ttgtaaaagg taatacttac    840
tatttttcaa ttttttcctc ctaggatttt tttcccctaa tgaatgtaag atggcaaaat    900
ttgccctgaa ataggtttta catgaaaact ccaagaaaag ttaaacatgt ttcagtgaat    960
agagatcctg ctcctttggc aagttcctaa aaaacagtaa tagatacgag gtgatgcgcc   1020
tgtcagtggc aaggtttaag atatttctga tctcgtgcc                          1059
```

```
        <210> 299
        <211> 329
        <212> PRT
        <213> Homo sapien

        <400> 299
Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe
1               5                  10                  15
Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
                20                  25                  30
Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser
            35                  40                  45
```

```
Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
    50              55              60
Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
65              70              75              80
Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
            85              90              95
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
            100             105             110
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
            115             120             125
Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
    130             135             140
Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
145             150             155             160
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
            165             170             175
Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
            180             185             190
Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
    195             200             205
Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
    210             215             220
Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
225             230             235             240
Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
            245             250             255
Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
            260             265             270
Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
    275             280             285
Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
    290             295             300
Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
305             310             315             320
Ser Met Leu Phe Leu Val Ile Ile Met
                325
```

```
        <210> 300
        <211> 148
        <212> PRT
        <213> Homo sapien

        <220>
        <221> VARIANT
        <222> (1)...(148)
        <223> Xaa = Any Amino Acid

        <400> 300
Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile
 1              5               10              15
Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
```

```
                   20                      25                      30
Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys
           35                      40                      45
Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu
       50                      55                      60
Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp
65                      70                      75                      80
Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp
                   85                      90                      95
Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro
               100                     105                     110
Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp
           115                     120                     125
Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
       130                     135                     140
Lys Asn Lys Val
145
```

```
        <210> 301
        <211> 1155
        <212> DNA
        <213> Homo sapien

        <400> 301
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc    60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag   120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag   180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg   240
ggcgcttctg agaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag   300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg   360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg   420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg   480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc   540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat   600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa   660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat   720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta   780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta   840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca   900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata   960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg  1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac  1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga  1140
accagaaata aataa                                                   1155
```

```
        <210> 302
        <211> 2000
        <212> DNA
        <213> Homo sapien

        <400> 302
```

```
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc      60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag     120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag     180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg     240
ggcgcttctg agaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag     300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg     360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg     420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg     480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc     540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat     600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa     660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat     720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta     780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta     840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca     900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata     960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg    1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac    1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaag    1140
ctgacatcag aggaagagtc acaaaggttc aaaggcagtg aaaatagcca gccagagaaa    1200
atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag    1260
aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc    1320
aatggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt    1380
cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa    1440
aaacagatgc caaaatactc ttctgaaaac agcaacccag aacaagactt aaagctgaca    1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg ccagccaga gctagaaaat    1560
tttatggcta tcgaagaaat gaagaagcac ggaagtactc atgtcggatt cccagaaaac    1620
ctgactaatg gtgccactgc tggcaatggt gatgatggat taattcctcc aaggaagagc    1680
agaacacctg aaagccagca atttcctgac actgagaatg aagagtatca cagtgacgaa    1740
caaaatgata ctcagaagca attttgtgaa gaacagaaca ctggaatatt acacgatgag    1800
attctgattc atgaagaaaa gcagatagaa gtggttgaaa aaatgaattc tgagctttct    1860
cttagttgta agaaagaaaa agacatcttg catgaaaata gtacgttgcg ggaagaaatt    1920
gccatgctaa gactggagct agacacaatg aaacatcaga gccagctaaa aaaaaaaaaa    1980
aaaaaaaaaa aaaaaaaaaa                                               2000
```

        <210> 303
        <211> 2040
        <212> DNA
        <213> Homo sapien

        <400> 303
```
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc      60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag     120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag     180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg     240
ggcgcttctg agaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag     300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg     360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg     420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg     480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc     540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat     600
```

```
gtccttgaca  acaaaaagag  gacagctctg  ataaaggccg  tacaatgcca  ggaagatgaa   660
tgtgcgttaa  tgttgctgga  acatggcact  gatccaaata  ttccagatga  gtatggaaat   720
accactctgc  actacgctat  ctataatgaa  gataaattaa  tggccaaagc  actgctctta   780
tatggtgctg  atatcgaatc  aaaaaacaag  catggcctca  caccactgtt  acttggtgta   840
catgagcaaa  aacagcaagt  cgtgaaattt  ttaatcaaga  aaaaagcgaa  tttaaatgca   900
ctggatagat  atggaaggac  tgctctcata  cttgctgtat  gttgtggatc  agcaagtata   960
gtcagccttc  tacttgagca  aaatattgat  gtatcttctc  aagatctatc  tggacagacg  1020
gccagagagt  atgctgtttc  tagtcatcat  catgtaattt  gccagttact  ttctgactac  1080
aaagaaaaac  agatgctaaa  aatctcttct  gaaaacagca  atccagaaca  agacttaaag  1140
ctgacatcag  aggaagagtc  acaaaggttc  aaaggcagtg  aaaatagcca  gccagagaaa  1200
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aagcatgaaa  gtaataatgt  gggattacta  gaaaacctga  ctaatggtgt  cactgctggc  1320
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tcagaggaag  agtcacaaag  gcttgagggc  agtgaaaatg  gccagccaga  gaaaagatct  1560
caagaaccag  aaataaataa  ggatggtgat  agagagctag  aaaattttat  ggctatcgaa  1620
gaaatgaaga  agcacggaag  tactcatgtc  ggattcccag  aaaacctgac  taatggtgcc  1680
actgctggca  atggtgatga  tggattaatt  cctccaagga  gagcagaac  acctgaaagc  1740
cagcaatttc  ctgacactga  gaatgaagag  tatcacagtg  acgaacaaaa  tgatactcag  1800
aagcaatttt  gtgaagaaca  gaacactgga  atattacacg  atgagattct  gattcatgaa  1860
gaaaagcaga  tagaagtggt  tgaaaaaatg  aattctgagc  tttctcttag  ttgtaagaaa  1920
gaaaaagaca  tcttgcatga  aaatagtacg  ttgcgggaag  aaattgccat  gctaagactg  1980
gagctagaca  caatgaaaca  tcagagccag  ctaaaaaaaa  aaaaaaaaaa  aaaaaaaaa  2040
```

<210> 304
<211> 384
<212> PRT
<213> Homo sapien

<400> 304

```
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1               5                   10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
                20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
                35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
    50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
                100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
                115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130                 135                 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                 150                 155                 160
```

Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
            165   170   175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180   185   190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
            195   200   205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210   215   220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225   230   235   240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
            245   250   255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260   265   270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
            275   280   285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
    290   295   300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305   310   315   320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
            325   330   335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340   345   350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
            355   360   365
Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
    370   375   380

        <210> 305
        <211> 656
        <212> PRT
        <213> Homo sapien

        <400> 305
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1   5   10   15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
            20   25   30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
            35   40   45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
            50   55   60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65   70   75   80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
            85   90   95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100   105   110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
            115   120   125

```
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130             135         140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145             150             155             160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
            165             170             175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180             185             190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
        195             200             205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210             215             220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225             230             235             240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
            245             250             255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260             265             270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
        275             280             285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
        290             295             300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305             310             315             320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
            325             330             335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340             345             350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
        355             360             365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
        370             375             380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385             390             395             400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
            405             410             415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
        420             425             430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
        435             440             445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
        450             455             460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465             470             475             480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
            485             490             495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
            500             505             510
Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
            515             520             525
Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
```

```
         530                      535                     540
Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser
545                     550                 555                 560
Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr
                    565                 570                 575
His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln
                580                 585                 590
Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
                595                 600                 605
Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
        610                 615                 620
Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
625                     630                 635                 640
Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
                    645                 650                 655
```

```
        <210> 306
        <211> 671
        <212> PRT
        <213> Homo sapien

        <400> 306
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1                   5                   10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
                20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
                35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
        50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
    115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130                 135                 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                 150                 155                 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                 170                 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
                180                 185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
            195                 200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210                 215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
```

```
225                     230                 235                     240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
            245             250             255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260             265             270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
            275             280             285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
            290             295             300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305             310             315             320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
            325             330             335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340             345             350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
            355             360             365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
            370             375             380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385             390             395             400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
            405             410             415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
            420             425             430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
            435             440             445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
450             455             460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465             470             475             480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
            485             490             495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
            500             505             510
Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
            515             520             525
Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
            530             535             540
His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
545             550             555             560
Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
            565             570             575
Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
            580             585             590
Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
            595             600             605
Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
            610             615             620
Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
625             630             635             640
```

```
Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
            645                 650                 655
Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
            660                 665                 670
```

```
        <210> 307
        <211> 800
        <212> DNA
        <213> Homo sapien

        <400> 307
atkagcttcc gcttctgaca acactagaga tccctcccct ccctcagggt atggccctcc      60
acttcatttt tggtacataa catctttata ggacaggggt aaaatcccaa tactaacagg     120
agaatgctta ggactctaac aggttttga gaatgtgttg gtaagggcca ctcaatccaa      180
ttttcttgg tcctccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg       240
catcagtaag ggccactaaa tccgaccttc ctcgttcctc cttgtggtct gggaggaaaa     300
ctagtgtttc tgttgctgtg tcagtgagca caactattcc gatcagcagg tccagggac       360
cactgcaggt tcttgggcag ggggagaaac aaaacaaacc aaaccatgg gcrgttttgt       420
ctttcagatg ggaaacactc aggcatcaac aggctcacct ttgaaatgca tcctaagcca     480
atgggacaaa tttgacccac aaaccctgga aaaagaggtg gctcatttt tttgcactat       540
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga     600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaaat     660
accttatgtc caagctttct tttcattgaa ggagaataca ctatgcaaag cttgaaattt     720
acatcccaca ggaggacctc tcagcttacc cccatatcct agcctcccta tagctcccct     780
tcctattagt gataagcctc                                                 800

        <210> 308
        <211> 102
        <212> PRT
        <213> Homo sapien

        <220>
        <221> VARIANT
        <222> (1)...(102)
        <223> Xaa = Any Amino Acid

        <400> 308
Met Gly Xaa Phe Val Phe Gln Met Gly Asn Thr Gln Ala Ser Thr Gly
 1               5                  10                  15
Ser Pro Leu Lys Cys Ile Leu Ser Gln Trp Asp Lys Phe Asp Pro Gln
            20                  25                  30
Thr Leu Glu Lys Glu Val Ala His Phe Phe Cys Thr Met Ala Trp Pro
            35                  40                  45
Gln His Ser Leu Ser Asp Gly Glu Lys Trp Pro Pro Glu Gly Ser Thr
            50                  55                  60
Asp Tyr Asn Thr Ile Leu Gln Leu Asp Leu Phe Cys Lys Arg Glu Gly
65                  70                  75                  80
Lys Trp Ser Glu Ile Pro Tyr Val Gln Ala Phe Phe Ser Leu Lys Glu
                85                  90                  95
Asn Thr Leu Cys Lys Ala
                100
```

```
<210> 309
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 309
Leu Met Ala Glu Glu Tyr Thr Ile Val
1               5


<210> 310
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 310
Lys Leu Met Ala Lys Ala Leu Leu Leu
1               5


<210> 311
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 311
Gly Leu Thr Pro Leu Leu Leu Gly Ile
1               5


<210> 312
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 312
Lys Leu Val Leu Asp Arg Arg Cys Gln Leu
1               5               10


<210> 313
<211> 1852
```

<212> DNA
<213> Homo sapiens

<400> 313
ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata 60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc 180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg 300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc 360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta 480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840
agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcaggggag cggcaagagc 900
aacgtggtcg cttggggaga ctacgatgac agcgccttca tggatcccag gtaccacgtc 960
catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccagaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt gctggacaga 1140
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa ggccgtacaa 1200
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatattcca 1260
gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa attaatggcc 1320
aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaagcatgg cctcacacca 1380
ctgctacttg gtatacatga gcaaaaacag caagtggtga aatttttaat caagaaaaaa 1440
gcgaatttaa atgcgctgga tagatatgga agaactgctc tcatacttgc tgtatgttgt 1500
ggatcagcaa gtatagtcag ccctctactt gagcaaaatg ttgatgtatc ttctcaagat 1560
ctggaaagac ggccagagag tatgctgttt ctagtcatca tcatgtaatt tgccagttac 1620
tttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaaaggct taaaggaagt gaaaacagcc 1740
agccagagct agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaacctg actaacggtg ccgctgctgg caatggtgat ga   1852

<210> 314
<211> 879
<212> DNA
<213> Homo sapiens

<400> 314
atgcatcttt catttcctgc atttcttcct ccctggatgg acaggggggag cggcaagagc 60
aacgtgggca cttctggaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
tgcaagtggt gctgccactg cttcccctgc tgcaggggga gcggcaagag caacgtggtc 180
gcttgggag actacgatga cagcgccttc atggatccca ggtaccacgt ccatggagaa 240
gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
gtcatgctca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540

ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaca gcaagtggtg aaatttttaa tcaagaaaaa agcgaattta 720
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcatc atcatgtaa   879

<210> 315
<211> 293
<212> PRT
<213> Homo sapiens

<400> 315
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
                    5   10   15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
                20   25   30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
            35   40   45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
        50   55   60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
    65   70   75   80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
                85   90   95

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
                100   105   110

Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
            115   120   125

Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
    130   135   140

Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu
145   150   155   160

Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
                165   170   175

Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu
            180   185   190

Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu
    195   200   205

```
Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
    210             215             220

Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
225             230             235             240

Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys
                245             250             255

Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
            260             265             270

Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met Leu Phe Leu
            275             280             285

Val Ile Ile Met
        290
```

<210> 316
<211> 584
<212> DNA
<213> Homo sapiens

<400> 316
```
agttgggcca aattcccctc cccctacagc ttgaagggga cataaccaat agcctggggt 60
tttttgtgg tcctttggag atttctttgc ttattttctt ctgggtgggg gtgattagag 120
gaggcttatc actaatagga aggggagcta tagggaggct aggatatggg ggtaagctga 180
gaggtcctcc tgtgggatgt aaatttcaag ctttgcatag tgtattctcc ttcaatgaaa 240
agaaagcttg gacataaggt atttcactcc atttgccttc cctcttacag aaaaggtcaa 300
gctgcaggat agtattgtaa tctgtacttc cctcaggtgg ccattttcc ccatcagaga 360
gagaatgttg gggccaagcc atagtgcaga aaaaaaaatg agccacctct ttttccaggg 420
tttgtgggtc aaatttgtcc cattggctta ggatgcattt caaaggtgag cctgttgatg 480
cctgagtgtt tcccatctga aagacaaaac tgcccatggt tttggtttgt tttgtttctc 540
cccctgccca agaactatca aactcctgag ccaacaacta aaaa 584
```

<210> 317
<211> 829
<212> DNA
<213> Homo sapiens

<400> 317
```
attagcttcc gcttctgaca acactagaga tccctcccct ccctcagggt atggccctcc 60
acttcatttt tggtacataa catctttata ggacaggggt aaaatcccaa tactaacagg 120
agaatgctta ggactctaac aggttttga gaatgtgttg gtaagggcca ctcaatccaa 180
tttttcttgg tcctccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
catcagtaag ggccactaaa tccgaccttc ctcgttcctc cttgtggtct gggaggaaaa 300
ctagtgtttc tgttgctgtg tcagtgagca caactattcc gatcagcagg gtccagggac 360
cactgcaggt tcttgggcag ggggagaaac aaaacaaacc aaaccatgg gcagttttgt 420
ctttcagatg ggaaacactc aggcatcaac aggctcacct ttgaaatgca tcctaagcca 480
atgggacaaa tttgacccac aaaccctgga aaaagaggtg gctcattttt tttgcactat 540
```

```
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaaat 660
accttatgtc caagctttct tttcattgaa ggagaataca ctatgcaaag cttgaaattt 720
acatcccaca ggaggacctc tcagcttacc cccatatcct agcctcccta tagctcccct 780
tcctattagt gataagcctc ctctaatcac ccccacccag aagaaaata         829
```

<210> 318
<211> 30
<212> PRT
<213> Homo sapien

<400> 318

```
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1               5                   10                  15

Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
            20                  25                  30
```

<210> 319
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 319

```
ggcctctgcc aatgggaact cagaagtagt aaaactcctg c                      41
```

<210> 320
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 320

```
gcaggagttt tactacttct gagttcccat tggcagaggc c                      41
```

<210> 321
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 321

```
ggggaattcc cgctggtgcc gcgcggcagc cctatggtgg ttgaggttga        50
ttccatgccg                                                    60
```

<210> 322
<211> 42
<212> DNA
<213> Artificial Sequnce

<220>
<223> PCR primer

<400> 322

```
cccgaattct tatttatttc tggttcttga gacattttct gg                42
```

<210> 323
<211> 1590
<212> DNA
<213> Homo sapiens

<400> 323
```
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccagggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgcacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcatcatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt cccgctggtg 420
ccgcgcggca gccctatggt ggttgaggtt gattccatgc cggctgcttc ttctgtgaag 480
aagccatttg gtctcaggag caagatgggc aagtggtgct gccgttgctt cccctgctgc 540
agggagagcg gcaagagcaa cgtgggcact tctggagacc acgacgactc tgctatgaag 600
acactcagga gcaagatggg caagtggtgc cgccactgct tcccctgctg caggggagt 660
ggcaagagca acgtgggcgc ttctggagac cacgacgact ctgctatgaa gacactcagg 720
aacaagatgg gcaagtggtg ctgccactgc ttcccctgct gcaggggagg cggcaagagc 780
aaggtgggcg cttggggaga ctacgatgac agygccttca tggagcccag gtaccacgtc 840
cgtggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccagaaag 900
gatctcatcg tcatgctcag ggacactgac gtgaacaaga aggacaagca aaagaggact 960
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcct gctggacaga 1020
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgataaa ggccgtacaa 1080
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg cactgatcc aaatattcca 1140
gatgagtatg gaaataccac tctgcactac gctatctata atgaagataa attaatggcc 1200
aaagcactgc tcttatatgg tgctgatatc gaatcaaaaa acaagcatgg cctcacacca 1260
ctgttacttg gtgtacatga gcaaaaacag caagtcgtga aattttaat caagaaaaaa 1320
gcgaatttaa atgcactgga tagatatgga aggactgctc tcatacttgc tgtatgttgt 1380
ggatcagcaa gtatagtcag ccttctactt gagcaaaata ttgatgtatc ttctcaagat 1440
```

```
ctatctggac agacggccag agagtatgct gtttctagtc atcatcatgt aatttgccag 1500
ttactttctg actacaaaga aaaacagatg ctaaaaatct cttctgaaaa cagcaatcca 1560
gaaaatgtct caagaaccag aaataaataa                                  1590
```

<210> 324
<211> 529
<212> PRT
<213> Homo sapiens

<400> 324

```
Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
                  5               10              15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
            20              25              30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
        35              40              45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
    50              55              60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
65              70              75              80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
                85              90              95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
            100             105             110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
            115             120             125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Pro Leu Val Pro Arg Gly Ser
    130             135             140

Pro Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys
145             150             155             160

Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys
                165             170             175

Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly
            180             185             190

Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys
            195             200             205

Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn
```

```
              210                     215                     220

Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg
225                 230                 235                 240

Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly
                245                 250                 255

Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala
                260                 265                 270

Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu
            275                 280                 285

His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val
            290                 295                 300

Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr
305                 310                 315                 320

Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu
                325                 330                 335

Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg
                340                 345                 350

Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu
                355                 360                 365

Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly
            370                 375                 380

Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala
385                 390                 395                 400

Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His
                405                 410                 415

Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val
                420                 425                 430

Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg
                435                 440                 445

Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser
    450                 455                 460

Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp
465                 470                 475                 480

Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His
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                485                       490                       495
    Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys
                500                       505                       510

    Ile Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn
                515                       520                       525

Lys
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